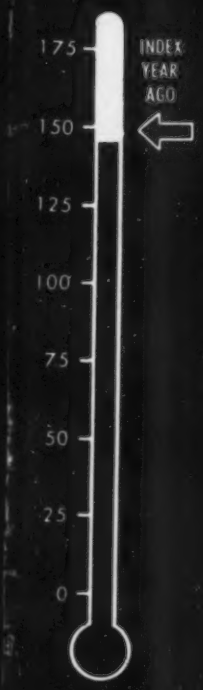
BUSINESS WEEK



What's Ahead For Autos

The story on sales
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Pricing strategy
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Design trend
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A McGRAW-HILL PUBLICATION

APRIL 6, 1957

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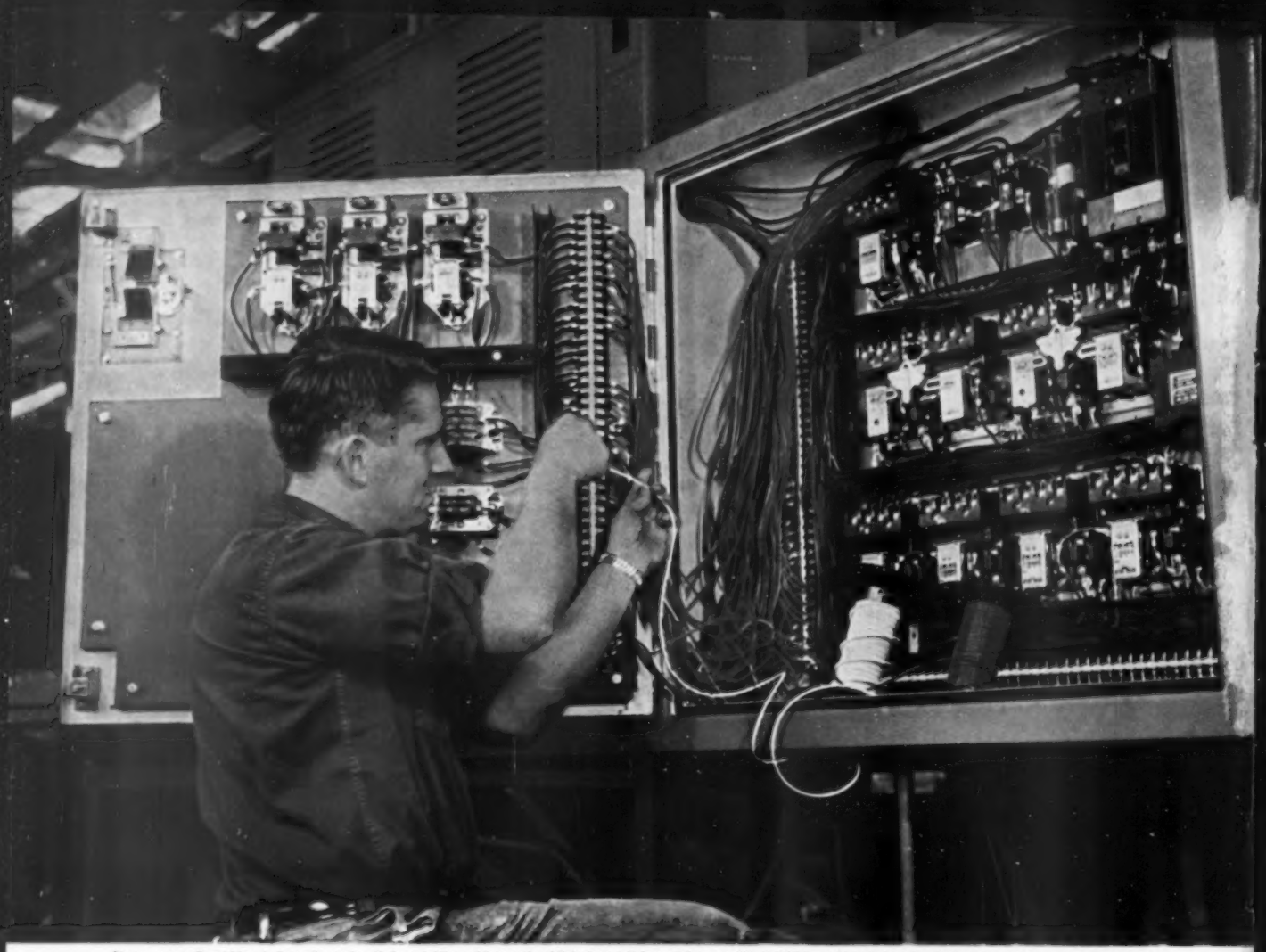


Photo courtesy Royal Electric Corp., Pawtucket, R. I., subsidiary of International Telephone & Telegraph Corp., and Pratt & Whitney Aircraft Division, United Aircraft Corp., E. Hartford, Conn.

How to keep an impulse on the right track

Ever wonder how an electrician keeps the many actuating impulses for an automatic machine tool on the right track? His secret lies in the brightly hued jackets for the many wires involved. By following a simple color code, he swiftly and surely solves any circuit.

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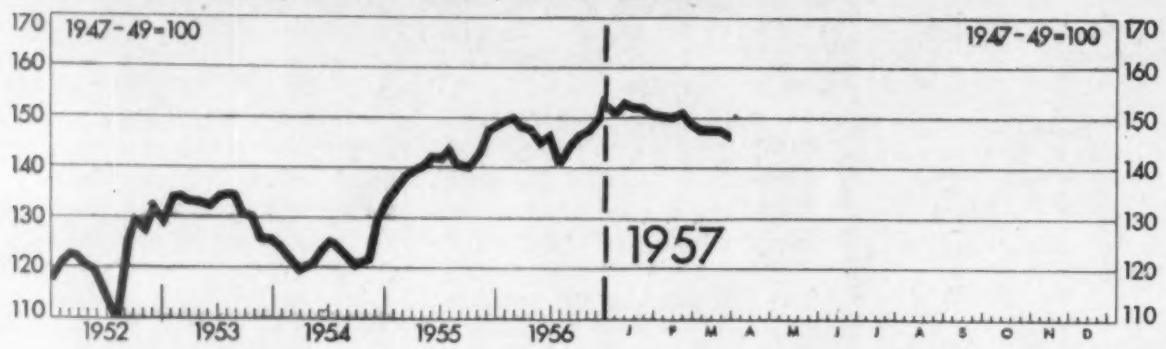
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NUMBER 1440

FIGURES OF THE WEEK



	1946 Average	Year Ago	Month Ago	Week Ago	§ Latest Week
BUSINESS WEEK INDEX (chart)	**91.6**	**148.4**	**149.7**	**†148.2**	**'147.0**
PRODUCTION					
Steel ingot (thous. of tons)	1,281	2,406	2,411	†2,364	**2,344**
Automobiles and trucks	62,880	159,958	172,816	†172,710	**165,238**
Engineering const. awards (Eng. News-Rec. 4-wk daily av. in thous.)	$17,083	$78,592	$57,739	$61,149	**$59,526**
Electric power (millions of kilowatt-hours)	4,238	10,992	11,791	11,723	**11,694**
Crude oil and condensate (daily av., thous. of bbls.)	4,751	7,149	7,519	7,818	**7,786**
Bituminous coal (daily av., thous. of tons)	1,745	1,660	1,642	†1,704	**1,710**
Paperboard (tons)	167,269	290,965	266,246	288,866	**274,516**
TRADE					
Carloadings: miscellaneous and l.c.l. (daily av., thous. of cars)	82	71	68	69	**69**
Carloadings: all others (daily av., thous. of cars)	53	45	44	46	**46**
Department store sales index (1947-49 = 100, not seasonally adjusted)	90	112	100	107	**113**
Business failures (Dun & Bradstreet, number)	22	263	284	318	**290**
PRICES					
Spot commodities, daily index (Moody's, Dec. 31, 1931 = 100)	311.9	416.8	411.7	410.1	**409.1**
Industrial raw materials, daily index (BLS, 1947-49 = 100)	††73.2	99.5	94.3	94.3	**93.8**
Foodstuffs, daily index (BLS, 1947-49 = 100)	††75.4	79.0	80.3	81.1	**81.3**
Print cloth (spot and nearby, yd.)	17.5¢	19.5¢	18.0¢	17.9¢	**17.9¢**
Finished steel, index (BLS, 1947-49 = 100)	††76.4	157.1	†173.8	174.0	**174.0**
Scrap steel composite (Iron Age, ton)	$20.27	$53.67	$50.50	$45.83	**$44.17**
Copper (electrolytic, delivered price, E & MJ, lb.)	14.045¢	46.350¢	31.910¢	31.780¢	**31.730¢**
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)	$1.97	$2.34	$2.35	$2.32	**$2.32**
Cotton, daily price (middling, 1 in., 14 designated markets, lb.)	**30.56¢	36.50¢	33.83¢	33.86¢	**33.87¢**
Wool tops (Boston, lb.)	$1.51	$1.74	$2.14	$2.14	**$2.10**
FINANCE					
500 stocks composite, price index (S&P's, 1941-43 = 10)	17.08	48.63	43.92	44.01	**44.28**
Medium grade corporate bond yield (Baa issues, Moody's)	3.05%	3.63%	4.46%	4.42%	**4.42%**
Prime commercial paper, 4 to 6 months, N. Y. City (prevailing rate)	¾-1%	3%	3⅛%	3⅛%	**3⅛%**
BANKING (Millions of Dollars)					
Demand deposits adjusted, reporting member banks	††45,820	55,733	56,370	55,704	**55,472**
Total loans and investments, reporting member banks	††71,916	85,631	85,038	86,747	**85,604**
Commercial and agricultural loans, reporting member banks	††9,299	27,781	30,314	31,579	**31,443**
U. S. gov't guaranteed obligations held, reporting member banks	††49,879	27,995	25,723	25,990	**25,164**
Total federal reserve credit outstanding	23,888	25,661	24,813	25,158	**24,930**

MONTHLY FIGURES OF THE WEEK		1946 Average	Year Ago	Month Ago	Latest Month
Consumer credit outstanding (in millions)	**February**	$6,704	$37,474	$40,916	**$40,513**
Installment credit outstanding (in millions)	**February**	$3,174	$28,915	$31,298	**$31,233**
Manufacturers' inventories (seasonally adjusted, in billions)	**February**	$21.3	$46.9	$51.5	**$51.8**

* *Preliminary, week ended March 30, 1957.*
† *Revised.*
†† *Estimate.*
** *Ten designated markets, middling ⅞ in.*
§ *Date for 'Latest Week' on each series on request*

THE PICTURES—Bakelite Co.—129 (bot.); Buick Motor Division—61 (bot. cen.); Burroughs Corp.—174 (bot.); Chrysler Corp.—61 (top rt.); Joe Clark—153, 174 (top); Grant Compton—112, 113; Ford Motor Co.—61 (top lt.); General Motors Corp.—61 (top cen.), Bern Keating—130, 13 (top lt. & bot. 2), 132 (top); Herb Kratovil—123; George Miller—44, 45; Miller-Trojan Mfg. Co.—129 (top), Harry Naltchayan—131 (top rt.), 132 (bot.); Bob Phillips—50; Southwest Research Institute—107; Joan Sydlow—42, 43, 61 (bot lt. & bot. rt.); U.P.—134; W.W.—81, 168; WNEW—68.



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We have helped this new concept by making new style telephones available, along with color, and with spring cords, illuminated dials, volume control, etc.

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READERS REPORT

A Low Blow

Dear Sir:

Your magazine is read and digested religiously by this reader. However, there are times when I am deeply hurt. For example, in [BW—Mar.9'57,p89] you mention the "Theo. Hamm Brewing Co. of Minneapolis."

. . . As of Mar. 17, the Theo. Hamm Brewing Co. was still in St. Paul where it has always been since its beginning. . . .

KURT F. LICHTHARDT
AREA MANAGER
NATIONAL FUND-RAISING SERVICES, INC.
NEW YORK, N. Y.

Dear Sir:

We always find BUSINESS WEEK most interesting and informative, and usually quite factual and correct.

However, in your fine article on the Brewing Industry [BW—Mar.9'57,p88] you committed a noteworthy error. Fact: The Theo. Hamm Brewing Co., founded here in 1865, is still headquartered in St. Paul, capital of Minnesota—and NOT in Minneapolis.

LOUIS VILLAUME, JR.
VILLAUME STEEL CO.
ST. PAUL, MINN.

Against Public Housing

Dear Sir:

. . . Your article [BW—Feb.23 '57,p75] seems to substantiate statements made by a number of people opposed to public housing in general. Why should the hundreds of thousands of workers making much less than these union employees pay added income taxes to subsidize public housing projects to rent to people making even half of what this party's income was.

I am sure that a breakdown showing the wage and rental scale 10 years ago compared with the wage and rental scale at the present time will show that these union workers have benefited all out of proportion to the property owners.

GEORGE W. SCRUGGS
ALAMO CONSTRUCTION CO.
SAN ANTONIO, TEX.

Propane Does the Trick

Dear Sir:

In Readers Report [BW—Mar. 2'57,p14] Robert R. Levitt of Wilmington, Del. stated that, "when a gas device that utilizes natural gas

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EASTMAN KODAK COMPANY, Rochester 4, N. Y.



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- ☐ **Personnel**—Identification photos, Job description, Orientation, Payroll records, Employee personnel records, House organs, Health records, Bulletins
- ☐ **Training and Safety**—Safety campaigns, Teaching, Reports, Fire prevention
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- ☐ **Production**—Time study, Work methods, Legible drawings, Schedules, Process records
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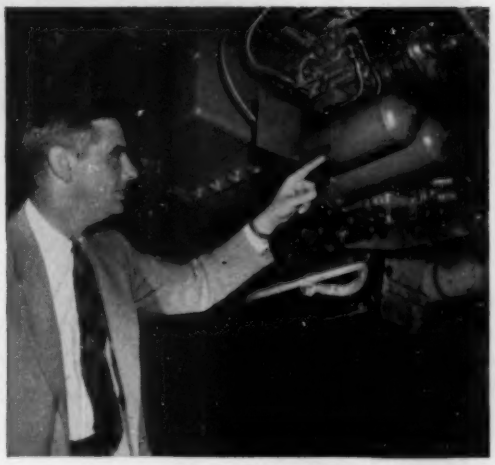
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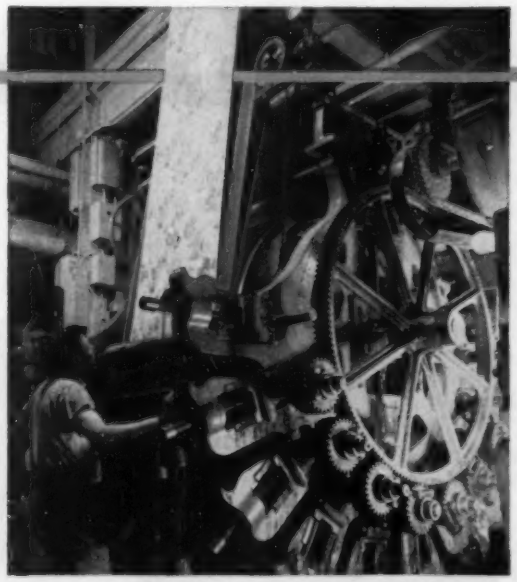
ENGINEERING SERVICE

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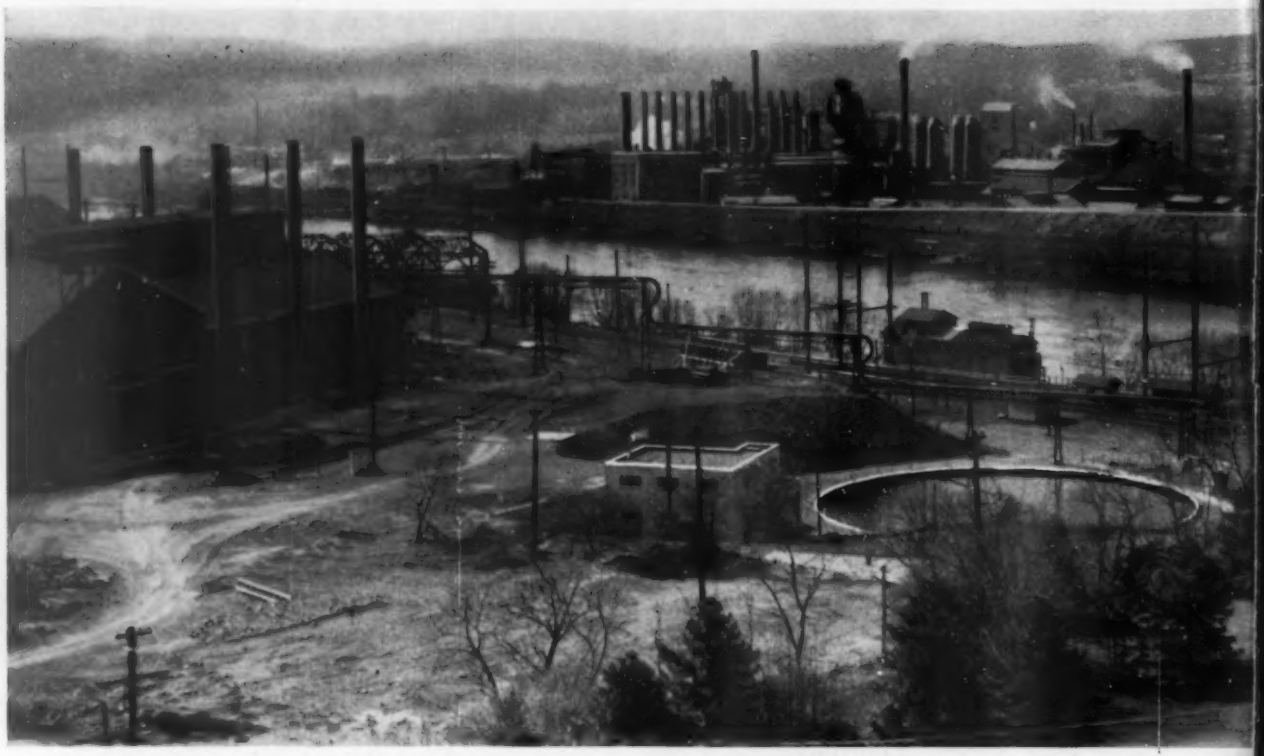
Take advantage of Gulf's Petro-engineering Service now. Write for 24-page descriptive booklet—or contact your nearest Gulf office.

GULF OIL CORPORATION

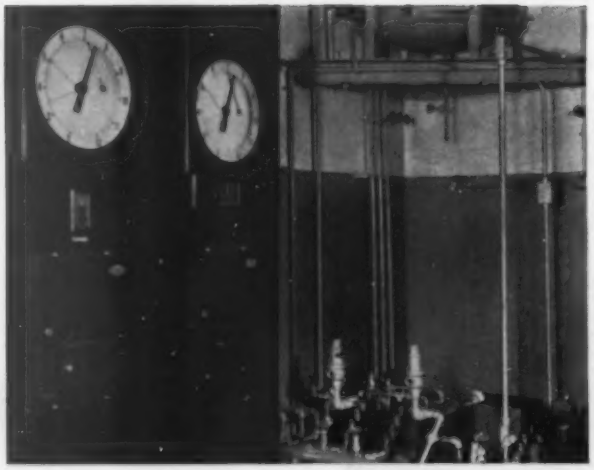
1822 Gulf Building
Pittsburgh 30, Pa.

GULF

A Gulf engineer can help you select the best cutting fluid for each machining operation. Chances are he will find practical ways to improve production, increase tool life and lower costs.



Reduce your water and



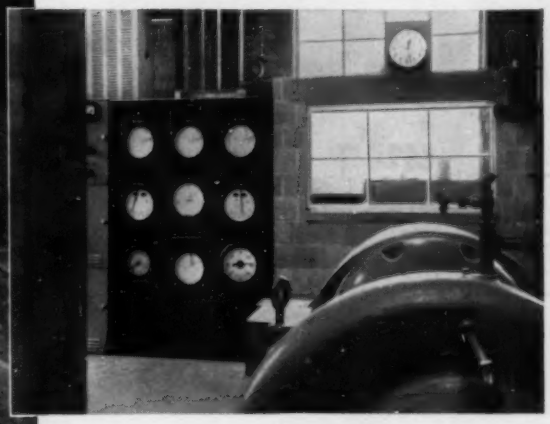
IN THE TEXTILE INDUSTRY—Alum usage was cut 95% when Honeywell controls were installed to clarify turbid river water at the textile mill of James Lees and Sons Company, Bridgeport, Pa. Use of other chemicals also decreased after installation of continuous alkalinity measurement and controlled chemical feeding systems engineered and built by Honeywell.



IN MUNICIPALITIES—Centralized instrumentation, incorporating a Honeywell *Filtermatic* control system, increases efficiency and cuts the supervisory workload at the O. N. Stevens Water Filtration Plant, Corpus Christi, Texas. At his instrument panel, a single operator can see everything he needs to know about the functioning of 12 filters that treat 48 million gallons of water daily.



IN THE STEEL INDUSTRY—At the Alan Wood Steel Company plant, Conshohocken, Pa., Honeywell controls condition both incoming river water and waste, treat a total of 20 million gallons of water daily. By providing a constant supply of uniform water, Honeywell controls effect savings throughout the plant. Controlled waste disposal helps build a good-neighbor reputation for the company.



waste treatment costs...

with Honeywell Instrumentation

In water treating operations, Honeywell instrumentation provides—automatically—a constant supply of uniform water. Treatment-chemical requirements are drastically reduced. Supervisory workloads are lightened. Process equipment is protected from corrosion by contaminated water. Improvement of overall production operations is a frequent end result.

In waste treating operations, Honeywell controls offer the economical answer to meeting government stream pollution regulations and maintaining good community relations. In some instances, dependable Honeywell controls pay for themselves by permitting profitable recovery of raw materials from waste.

Honeywell, the world's largest manufacturer of automatic controls, is ready to make *customized instrumentation* a rewarding reality in your own plant . . . for water and waste treatment, or for *any* phase of your production operation.

MINNEAPOLIS-HONEYWELL REGULATOR CO., *Industrial Division*, Wayne and Windrim Avenues, Philadelphia 44, Pa.—in Canada, Toronto 17, Ontario.

MINNEAPOLIS
Honeywell
BROWN INSTRUMENTS
First in Controls

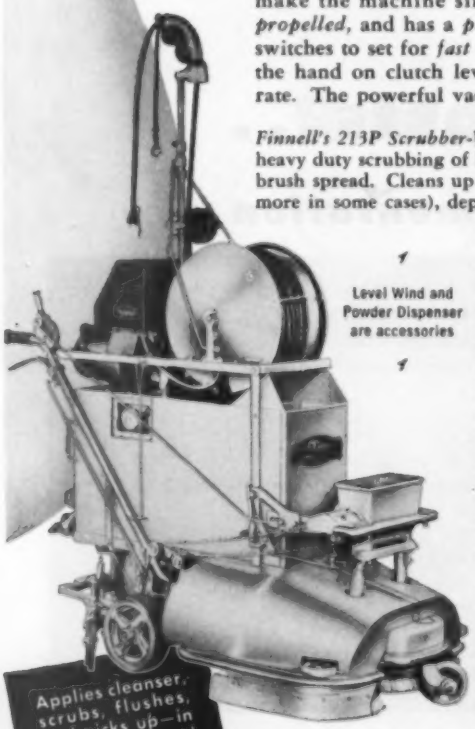
MECHANIZE all Scrubbing Operations into 1

with a COMBINATION SCRUBBER-VAC!

Here's a timely answer to the need for reducing labor costs — *a single cleaning unit that completely mechanizes scrubbing.* A *Combination Scrubber-Vac* applies the cleanser, scrubs, flushes if required, and picks up (damp-dries the floor) — *all in one operation!* Maintenance men like the convenience of working with this single unit... the thoroughness with which it cleans... and the features that make the machine simple to operate. It's *self-propelled,* and has a *positive* clutch. There are no switches to set for *fast* or *slow* — slight pressure of the hand on clutch lever adjusts speed to desired rate. The powerful vac performs quietly.

Finnell's 213P Scrubber-Vac at left, an *electric* unit for heavy duty scrubbing of large-area floors, has a 26-inch brush spread. Cleans up to 8,750 sq. ft. per hour (and more in some cases), depending upon condition of the floors, congestion, et cetera. (The machine can be leased or purchased.) *Finnell* makes a full range of sizes, and *gasoline* or *propane powered* as well as *electric* models. From this complete line, you can choose the size and model that's exactly right for *your* job (no need to *over-buy* or *under-buy*). It's also good to know that *a Finnell Floor Specialist and Engineer is nearby* to help train your maintenance operators in the proper use of the machine and to make periodic check-ups.

Level Wind and Powder Dispenser are accessories



For demonstration, consultation, or literature, phone or write nearest *Finnell Branch* or Finnell System, Inc., 3804 East St., Elkhart, Ind. Branch Offices in all principal cities of the United States and Canada.

FINNELL SYSTEM, INC.
Originators of Power Scrubbing and Polishing Machines
FINNELL
BRANCHES IN ALL PRINCIPAL CITIES

is developed that will cool the home in summer as well as warm it in winter, then natural gas can take its place as a luxury fuel."

For Mr. Levitt's information, he may investigate the propane (LP) gas installations we have at the Hotel Lord De La Warr, a half-mile south of Wilmington, where he will find 36 two-ton units made by Servel with which we heat in winter and cool in summer the entire 144 units of this motel on an all-year-round basis. We have been doing this for the past four years.

We were surprised that Mr. Levitt did not know these devices had been on the market for a good number of years. Other companies in addition to Servel are experimenting with a similar device.

HARRY A. SCHAGRIN
PRESIDENT
SCHAGRIN GAS CO.
MIDDLETOWN, DEL.

Coaching the Top Brass

Dear Sir:

Congratulations on a difficult job well done in your Executive Coaching [BW—Mar.9'57,p69]. You have called attention to one of the most serious weaknesses in most management development programs. In fact, it is a two-fold weakness, that of failure to secure good information about performance and promotability, and, secondly, failure to make effective use of such information in securing actual change.

The most disturbing note in your reporting was the statement that the appraisal review is pretty largely a middle-management affair. I am sure that this is accurate reporting, but our experience suggests that the need for executive discussions about performance is just as great at the top of an organization as it is the middle. A few companies are really operating on this basis. . . .

WALTER R. MAHLER
MAHLER ASSOCIATES,
NEW YORK, N. Y.

Proposal in Dispute

Dear Sir:

Your article on Brazilian automotive industry, Auto-Truck Boom in Brazil Guns Its Motors [BW—Mar.2'57,p94] was extremely interesting but implication that we took advantage of Chrysler position or asked exaggerated conditions is unfair and unjustified. We value Chrysler association for past 12 years very greatly and always have been ready, as we are now, to as-

Why one man is sad at "The Most Happy Fella"



It started out to be a great evening. Dinner with an old customer, aisle seats, a smash first act. But now, at intermission, Gardner has had it. The second act is going to seem like "Macbeth."

You see, that old customer has just told Gardner he's cancelling out. Friendship or not, he's fed up. After all, *he's* in business, too. And what he needs is a *reliable* supplier. One who can make enough goods — and *deliver* them.

Gardner's medium-sized company makes outstanding products. But it lacks proper management control — the kind it *could* have had with the Keysort Plant Control Plan. PCP gives you comprehensive reports on all your operations *when you need them* . . . can thus help you develop a shorter manufacturing cycle. Making more goods in less time guarantees quantity *and* delivery . . . helps lower costs by providing a greater return on the investment in labor and material.

With just five fast, accurate Keysort PCP reports — 1 daily, 2 weekly, 2 monthly — you can obtain complete modern management control of your business and your profits. At remarkably low cost.

The nearby McBee man has a presentation which will show you how it's done. Phone him, or write us for illustrated folder containing an example of each report.

McBEE KEYSORT®

Punched-card accounting for any business

Manufactured exclusively by **The McBee Company, Athens, Ohio** • Division of Royal McBee Corporation
Offices in principal cities • In Canada: The McBee Company, Ltd., 179 Bartley Drive, Toronto 16, Ontario

daylight's free!

slash lighting costs with Corrulux



HERE'S PROOF:

... in this 57,000 square foot fabricating plant.

ESTIMATED LIGHTING COST — $600.00 PER MONTH
(12 HR. DAY, NO SKYLIGHTS)

ACTUAL LIGHTING COST — (LESS THAN) $100.00 PER MONTH
(WITH CORRULUX)

SAVINGS — $500.00 PER MONTH



Corrulux is available in a wide range of sheet sizes and corrugations to match standard roofing and siding

Flat Corrulux panes are ideal for industrial glazing . . . permit you to reglaze for the last time.

Obviously, one year's savings will more than absorb original Corrulux cost — take it from there. Just figure your added profits in ten years!

For new construction or existing daylighting problems... let us show you how you can make similar savings.

L·O·F GLASS FIBERS Corrulux®

Corrulux®

L.O.F. GLASS FIBERS COMPANY,
P. O. BOX 20026, HOUSTON 25, TEXAS

sist Chrysler and defend its interests in Brazil. Exploratory discussions were held regarding purchase of Brasmotor but not necessarily a formal proposal . . . was ever made.

JOSE BASTOS THOMPSON
PRESIDENT
COMPANHIA INDUSTRIAL E COMMERCIAL BRASMOTOR
SAO PAULO, BRAZIL.

• Our story said Chrysler made an offer, not a formal proposal.

Rare Opportunity

Dear Sir:

Re: [BW—Mar.2'57,p70] the proposed flight of the man-made satellite would be this year or in the early part of 1958. As announced, the apparatus that the satellite would take to heaven will be equipped for photographing of objects, recording of atmospheres, and radio broadcastings. Would it not also be possible for the satellite to take photographs of "Glory" and "Hell" in the unexplored upper atmosphere so that we people on earth would be more informed of the million of years . . . of . . . written information in heaven? The law of space seems to provide that human exploration of the fields above has promising information of the mysteries of the universe and if these two biblical words are really there, our minds would no doubt be directed for peace and for one living God.

This is for the consideration of our scientists today.

JOSE M. ALVANES
LA CARLOTA, NEGROS OCCIDENTAL, PHILIPPINES.

Parking Lot Plan

Dear Sir:

Your article Parking Lots Eat Up Plant Sites [BW—Mar.16'57, p71] is true, informative and a real problem. We are offering to industry a plan whereby we will build a parking building for industrial plants, at our expense, lease it to them for 20 years. We will operate it for them or they may operate it themselves. The rental is a modest figure and in many cases is less than they are now paying to rent vacant lots for employee parking but at expiration of our lease we will give title to the parking building to the industrial company.

The rental . . . is completely written off. . . .

WALT CRICHTON
PRESIDENT
AUTOMAT PARKING CO.
CHARLESTON, W. VA.

Another cost-conscious manufacturer finds that—

When the going gets tough ...put it on a Warner & Swasey



A modern Warner & Swasey Turret Lathe's cost-cutting combination of power, rigidity and accuracy has increased production of this piece 200% for R. H. Little Co. of Canton, Ohio.

TOUGH STEEL diesel-electric locomotive parts, designed by The Timken Roller Bearing Company, are run in 500-piece lots at the rate of 12 to 15 daily on R. H. Little's new Warner & Swasey 4-A Saddle Type Turret Lathe.

In addition to heavy stock removal, severely-interrupted cuts put a terrific strain on both tooling and machine. But their Warner & Swasey's power and rigidity easily handle this job.

This same casting was previously machined at the rate of only 5 a day when run on a 20-year-old lathe. Production was held down due to the machine's lack of horsepower and rigidity. This caused excessive downtime for tool changing and required constant operator attention to maintain required accuracy.

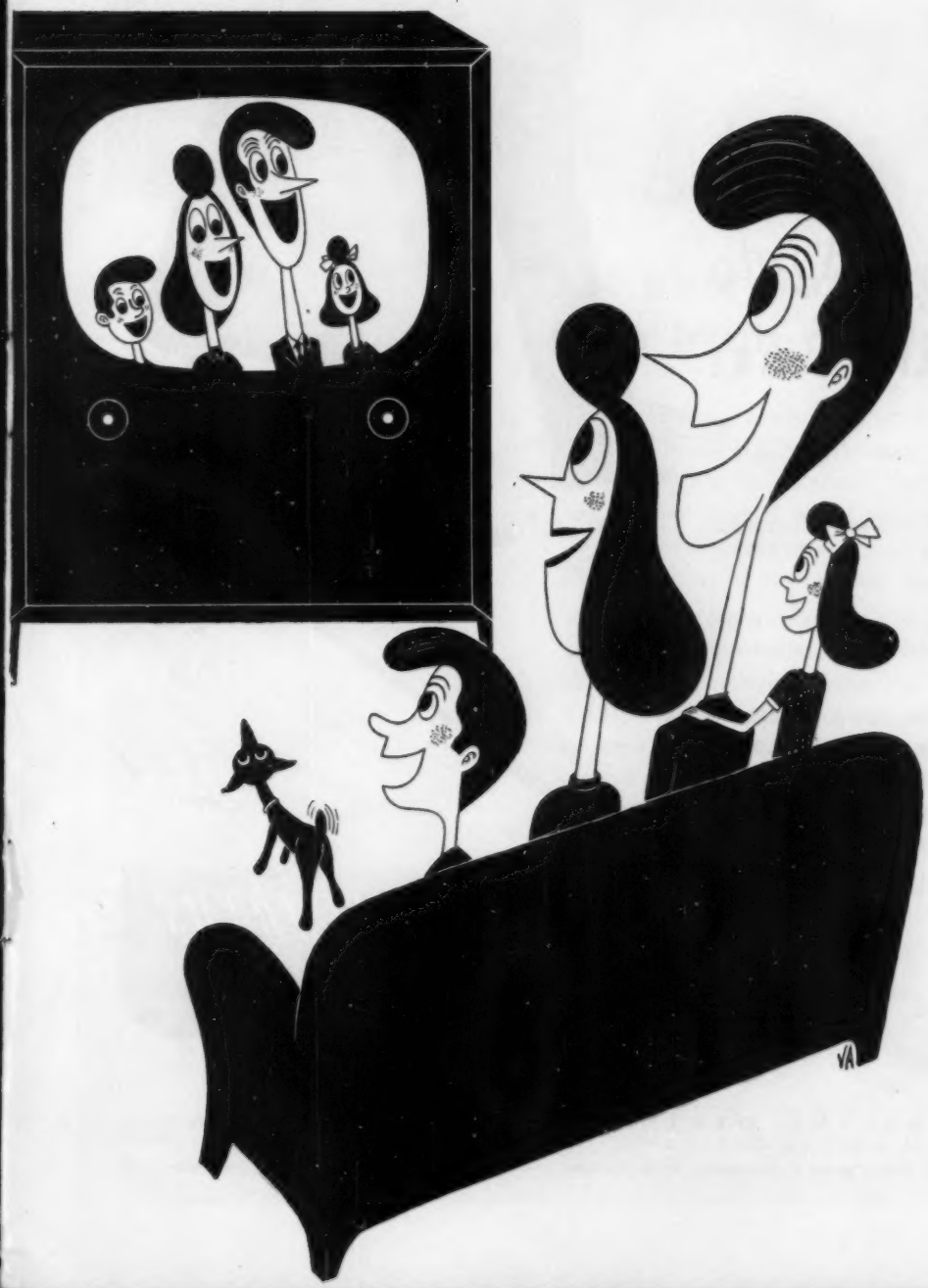
This is but another example of how today's alert metalworking management is profiting through the realization that... **When the going gets tough... put it on a Warner & Swasey.**



WARNER & SWASEY
Cleveland
PRECISION MACHINERY SINCE 1880

YOU CAN PRODUCE IT BETTER, FASTER, FOR LESS...WITH A WARNER & SWASEY

By showing most people what they most like to see CBS Television attracts the greatest audiences day and night and is the largest single advertising medium in the world...



1. CBS Television broadcasts 8 of the 10 most popular nighttime programs . . . 6 of the top 10 during the daytime (FIRST FEBRUARY 1957 NTI).

2. The number of people who *actually watch* the average *program*—not the total number of people who casually tune to a network sometime during the course of the broadcast week.

3. CBS Television daytime programs deliver a 23% larger average audience than the only other network with a daytime program schedule (7 AM-6 PM, MONDAY-FRIDAY, FIRST FEBRUARY 1957 NTI).

4. CBS Television nighttime programs deliver a 21% larger average audience than the second ranking network . . . 79% larger than the third (6 PM-11 PM, SEVEN NIGHTS OF THE WEEK, FIRST FEBRUARY 1957 NTI).

5. Today, as in 1956, 1955 and 1954.

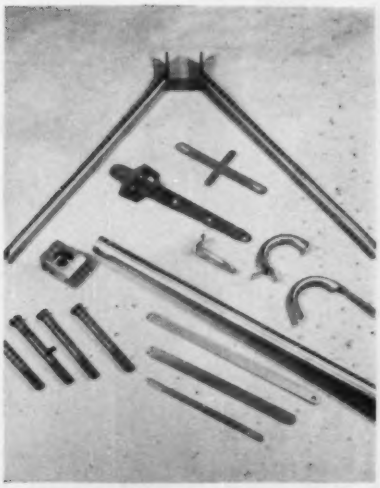
6. According to the most recent PIB figures, CBS Television is earning a 21.5% larger share of America's total advertising appropriation than any other single advertising medium.


you just stepped into
the URETHANE AGE!
From now on expect to see more of the magic of urethanes wherever you go.
Urethanes made of National Aniline's Nacconates* can be produced in a variety of flexible-to-rigid foams, unbelievable adhesives and tough coatings.
They'll insulate, cushion, absorb shock and sound, protect, pad, seal, bond and perform a thousand-and-one other useful jobs!
It's time *now* to investigate urethane applications in your business! This great new synthetic is bound to hold opportunities for you.
For additional information about this versatile new material, write National Aniline today!
*Trademark name for National Aniline's Diisocyanates
AB
URETHANE FOAMS
based on
NATIONAL NACCONATES*
NATIONAL ANILINE DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 RECTOR ST., NEW YORK 6, N.Y.
Akron Atlanta Charlotte Chattanooga Chicago Columbus, Ga. Greensboro Los Angeles New Orleans Philadelphia Portland, Ore. Providence Richmond San Francisco Toronto

Progress with **TITANIUM**



Over 1,000 years of salt water would whittle only 1/1000 of an inch off titanium



Marine fittings fabricated from Mallory-Sharon unalloyed titanium are immune to salt water corrosion, also offer substantial weight savings.

Salt water and marine atmospheres are traditional enemies of most metals. But not titanium. Its resistance to such corrosive attack is unchallenged. Tests show a corrosion rate so infinitesimal that it would actually take over a thousand years of salt water exposure to reduce the thickness of a titanium sheet by one-thousandth of an inch.

Titanium carries this exceptional resistance into industrial uses, where the economics of corrosion are also important. It is uniquely superior in resisting corrosion by such common industrial chemicals as nitric acid, solutions of chlorine, chlorinated compounds. Thus it more than pays its way in process vessels, piping, filters, heat exchangers, and many other places in processing industries.

Where can *you* use titanium to reduce the waste of corrosion? As a leading producer, Mallory-Sharon can help you evaluate titanium, help you "design ahead" with this exceptional metal. Write Dept. Q-4 for complete information.

MALLORY Ti SHARON

MALLORY-SHARON TITANIUM CORPORATION • NILES, OHIO

Producers of titanium and titanium alloy sheet, strip, plate, rod, bar, billets

Now! Greater comfort for your office, store, or factory!

New 1957 American Blower



Temperature-perfect surroundings — that's what you get with an American Blower Packaged Air Conditioner! Often, it can be the key to peak efficiency in your office, store, or factory.

Packaged Air Conditioner

New, modern styling . . . low-cost, whisper-quiet operation . . . efficient performance . . . full range of sizes — plus a full five-year warranty on entire refrigeration circuit!

Whatever your business . . . wherever you desire cool, clean, quiet, conditioned comfort . . . there's a modern, low-cost American Blower Packaged Air Conditioner to answer your needs exactly.

Here are units designed with your business in mind — comfort-engineered to condition *every corner* of your office, store, or factory without chilling blasts! They cool, filter, dehumidify, and circulate the air . . . heat when equipped with heating coils.

All new. These American Blower Packaged Air Conditioners are completely new. The design features minimum plenum height, which allows installation even where space is limited. The gray metallescent-enamel finish fits any décor; is durable, attractive, easy to clean.

Low-cost operation. Because they're engineered for top efficiency, American Blower Packaged Air Conditioners give you low-cost operation year after year. And there's a full five-year warranty on the entire refrigeration circuit. The controls are easily adjustable, make it simple for you to set the unit to the comfort level that suits you best.

Quiet, vibration-free. These new units are exceptionally quiet and vibration-free in operation. Compressors float on spring mountings, and the fans are of a special design. The casing is of heavy-gauge construction, and insulated for low operational sound level. As an additional cushion against noise, the fan bearings are rubber mounted, permanently lubricated.

There are seven models of American Blower Packaged Air Conditioners, from 3 to 20 tons . . . so there's one just right for your office, store, or factory. And remember, you buy with confidence when you buy American Blower — a leading name in air-conditioning and air-handling equipment for over 75 years.

Contact your nearest American Blower distributor or branch office right away. Get full details on American Blower Packaged Air Conditioning for your business. American Blower Division of American-Standard, Detroit 32, Michigan.

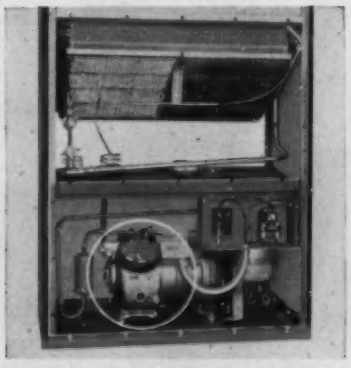
AMERICAN BLOWER

Division of AMERICAN-Standard

Air-conditioning equipment for every business



New, low plenum design features adjustable horizontal and vertical louvers for controlled air distribution in the room.



The compressor is hermetically sealed, accessible, trouble-free—never needs oil, adjusting, or seasonal pumpdowns.



Handy controls are concealed beneath attractive American Blower emblem, adjustable to set unit for desired conditions.

Armour finds an answer to rising marketing costs through

American's Distribution Consultant



Service for Management





More than a better way to ship, airfreight is more accurately a better way to do business. Distribution by air can often increase sales as well as lower overall operating costs.

Armour Laboratories, one of the world's leading producers of drug products, is one of the many companies which now benefit from airfreight. In March, 1955, Armour authorized American's consultants to study its distribution system and recommend possible improvements. A comparative cost analysis revealed that direct distribution by air would be far more economical than distribution by surface transportation which required regional warehousing. In Armour's Midwestern territory, for example, distribution costs were reduced more than 50% by using airfreight service.

By November of 1955, Armour had already eliminated one warehouse and had begun to convert entirely to distribution by air.

The superior service and impressive savings on handling, inventory, packing and warehousing realized by Armour are benefits which airfreight may be able to provide for your company as well. If you would like to use American's Distribution Consultant Service to explore the potential advantages of this modern form of transportation, write to: Mr. S. C. Dunlap, Vice President—Cargo, American Airlines, Inc., 100 Park Avenue, New York 17, New York.

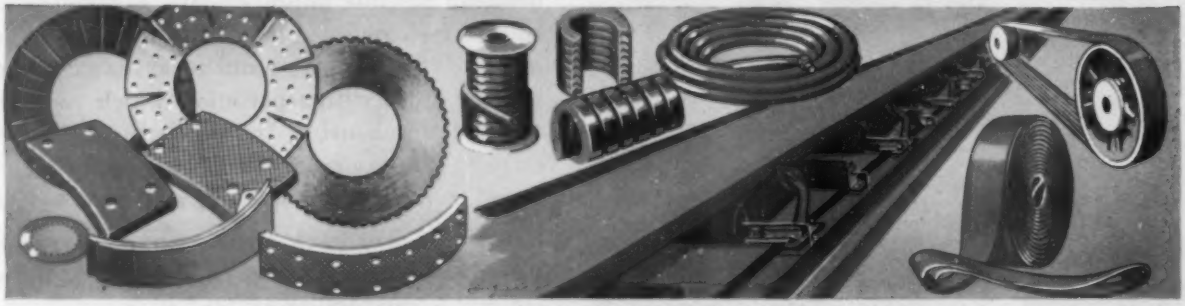
AMERICAN AIRLINES AIRFREIGHT

a faster way to ship . . . a better way to do business

Whoever You Are . . . Whatever Your Business . . . An R/M Product Touches Your Life



R/M PRODUCTS HELP FARMERS produce this country's food requirements more efficiently and more economically than ever before.



SOME OF THE R/M PRODUCTS used in agriculture include brake blocks, linings, clutch facings, and automatic transmission friction parts; mechanical packings and gasket materials; suction, creamery, spray and anhydrous ammonia hose; grain conveyor belts; Poly-V® drives; conventional V-belts and endless flat belts.

R/M Products in Agriculture Give More Use Per Dollar

Whether tilling the soil, enriching it, spraying crops or harvesting them, the farmer relies constantly on many R/M products. R/M Brake Blocks, Linings, Clutch Facings, and Automatic Transmission Friction Parts on his trucks and tractors provide safe, sure stops. They help transmit power smoothly and dependably from engines to wheels, as they do in giant earth-moving equipment and millions of passenger cars.

In fertilizing, he uses R/M Anhydrous Ammonia Hose. To increase fruit crops, he uses R/M Orchard Spray Hose, and, for irrigation, tough, flexible R/M Hose. On his combines, harvesters, balers, irrigation pumps, and other equipment are R/M Poly-V Drives, conventional V-belts, and endless flat belts. And here R/M Mechanical Packings and Gasket Materials are chosen to give tight seals. R/M Vee-Flex Rings pack the hydraulic cylinders that operate labor-saving attachments. And a variety of farm products are carried on R/M Grain and Elevator Belts into storage elevators across the country. R/M Industrial Adhesives bond metal to metal and other materials used on farm equipment.

Not only agriculture, but hundreds of other industries as well depend on the economical, reliable products and specialized skills of Raybestos-Manhattan. R/M keeps seven great plants and laboratories working in four big fields—asbestos, rubber, engineered plastics, and sintered metal. Take advantage of this experience. Talk it over with R/M if your problem involves any of these materials.

RAYBESTOS-MANHATTAN, INC. PASSAIC, NEW JERSEY

Raybestos . . . Condor · MANHATTAN . . . Grey-Rock

SPECIALISTS IN ASBESTOS, RUBBER, SINTERED METAL, ENGINEERED PLASTICS

Other R/M Products: Abrasive and Diamond Wheels • Asbestos Textiles • Engineered Plastics • Sintered Metal Products • Industrial Rubber • Rubber Lined and Covered Equipment • Industrial Hose • Laundry Pads and Covers • Bowling Balls

Factories: Passaic, N.J. • Bridgeport, Conn. • Manheim, Pa. • No. Charleston, S.C. • Crawfordsville, Ind. • Neenah, Wis. • Peterborough, Ontario, Canada

R/M

new Formica

Here it is! The first copper clad laminated plastic specially designed for large volume manufacturers . . .

CIRPRINT



TV - Radio - Phonograph and other electrical/electronic product manufacturers can benefit from Cirprint, the first copper clad laminated plastics ever to offer exactly the right combination of properties for this application. If you're a large volume consumer of circuitry, it will pay you to check Cirprint today.

Exceeds NEMA standards for XXP . . . meets UL requirements for printed circuitry . . . meets MIL-P-3115B spec for type PBE-P

New Formica Cirprint is far superior to any XXP ever made. The latest product of Formica-4 research, it is the first and only copper clad especially designed to meet the requirements of large volume manufacturers:

High IR: 250,000 megohms after 96 hours at 35°C and 90% relative humidity.

Cold punching: up to and including 1/16".

Low moisture absorption: 0.80% in 1" x 3" x 1/16" sample after 24 hours immersion.

You can *see* the quality because Cirprint is translucent. Its smooth structure is free of all impurities. Cirprint is also watermarked for your protection.

Evaluate the contribution Cirprint can make to your products. Send today for free bulletin 755. Use the handy coupon below, or write Formica Corporation, subsidiary of American Cyanamid, 4505-7 Spring Grove Ave., Cincinnati 32, Ohio.

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FORMICA 4

1st choice in laminated plastics

- Application engineering
- Fabricating
- Research
- Customer stock service



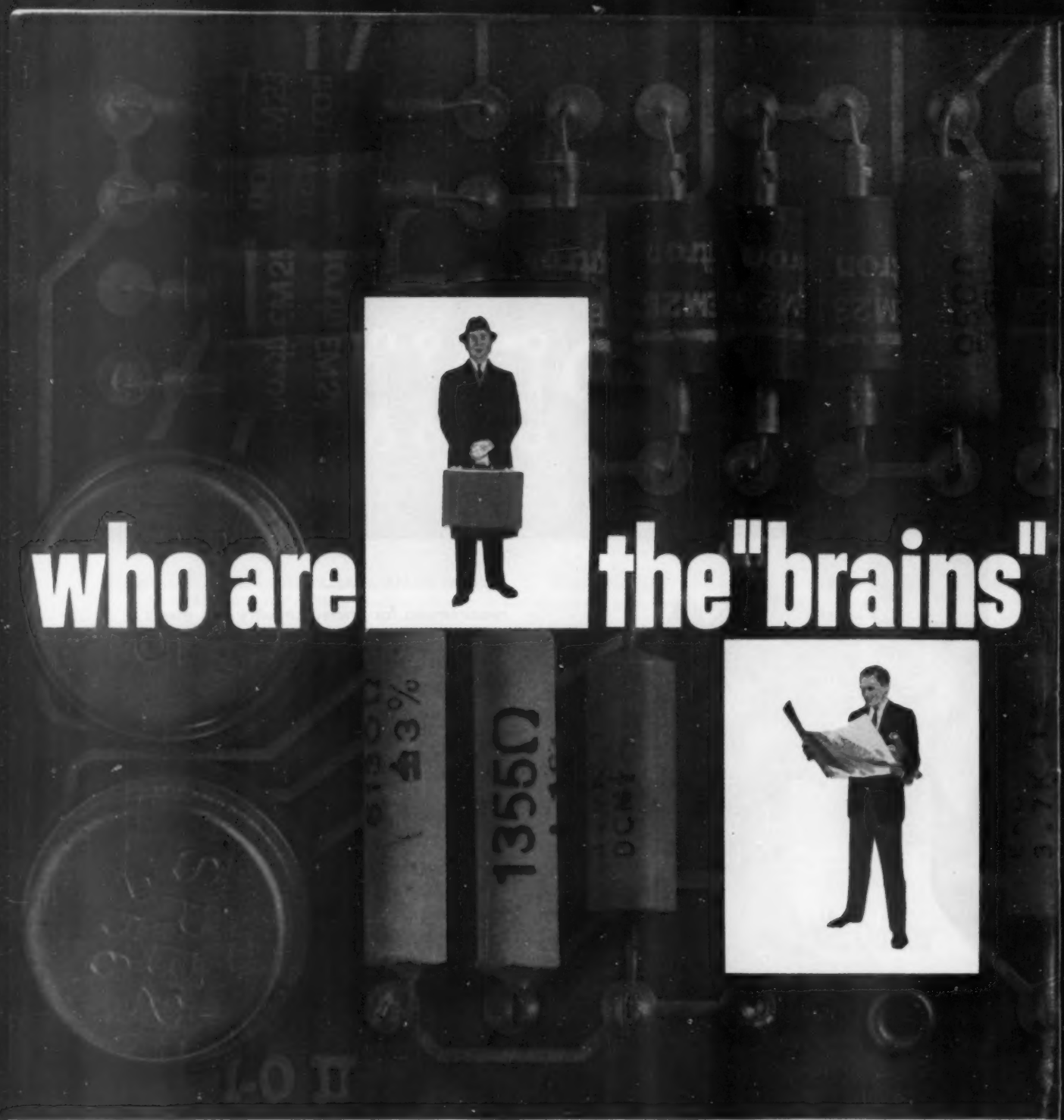
FORMICA CORPORATION
4505-7 Spring Grove Ave. • Cincinnati 32, Ohio
Please send me a copy of Cirprint bulletin 755.

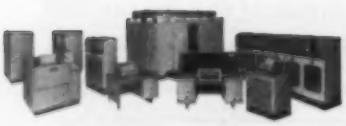
Name_____

Company_____ Title_____

Address_____

City_____ Zone_____ State_____





UNIVAC I & II—For data-processing which involves large volumes of input and output.

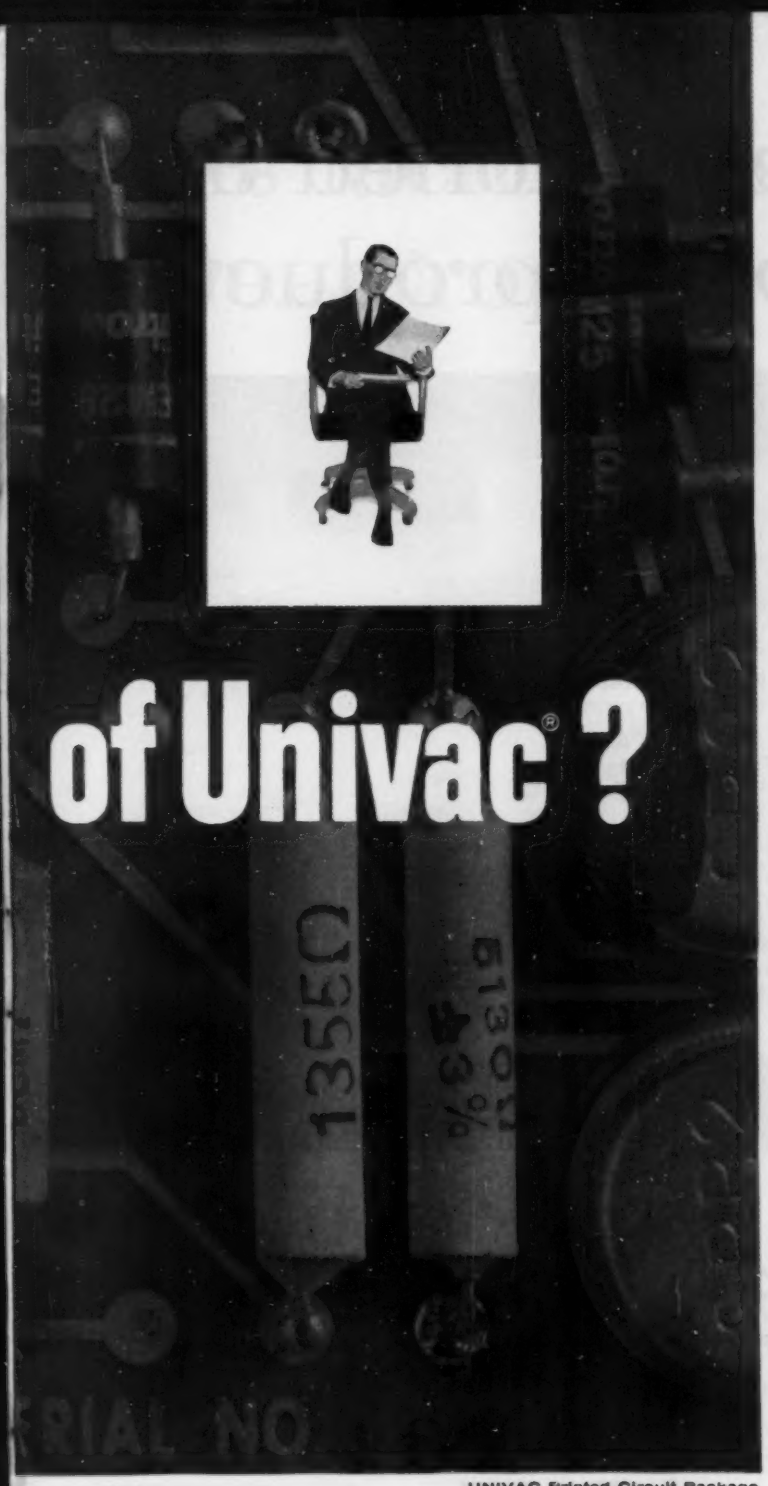


UNIVAC Scientific—For complex and intricate computations of engineering and research.



UNIVAC File-Computer—For instantaneous random access to large-scale internal storage.

THERE'S A **UNIVAC** SYSTEM FOR EVERY ELECTRONIC COMPUTING NEED



of Univac®?

UNIVAC Printed Circuit Package

DATA-PROCESSING EXPERTS who first introduced commercial electronics and, for over 6 years, have been programming and solving customer problems with UNIVAC.

COMPUTER EXPERTS with over 10 years' experience, dating back to the development of the first large-scale electronic computer.

SYSTEMS EXPERTS with a background of more than 80 years of systems engineering—80 years of analyzing business problems and devising short cuts for better records control.

No computer ever built—not even a member of the famous Remington Rand UNIVAC family—has a true brain of its own. It depends on the human intelligence which directs it. Its value to the user rests largely on the experience, background, skill, and imagination of those who prepare its instructions.

That's why Remington Rand is uniquely qualified to help you cash in on the tremendous savings now available through electronics. For Remington Rand personnel have pioneered the field, offering to UNIVAC users a wealth of computer knowledge that is unobtainable elsewhere.

Remington Rand offers, too, an unrivalled library of computer programs . . . the latest and best techniques of automatic programming, to enable you to get under way faster, more easily, and more economically in any type of computer applications.

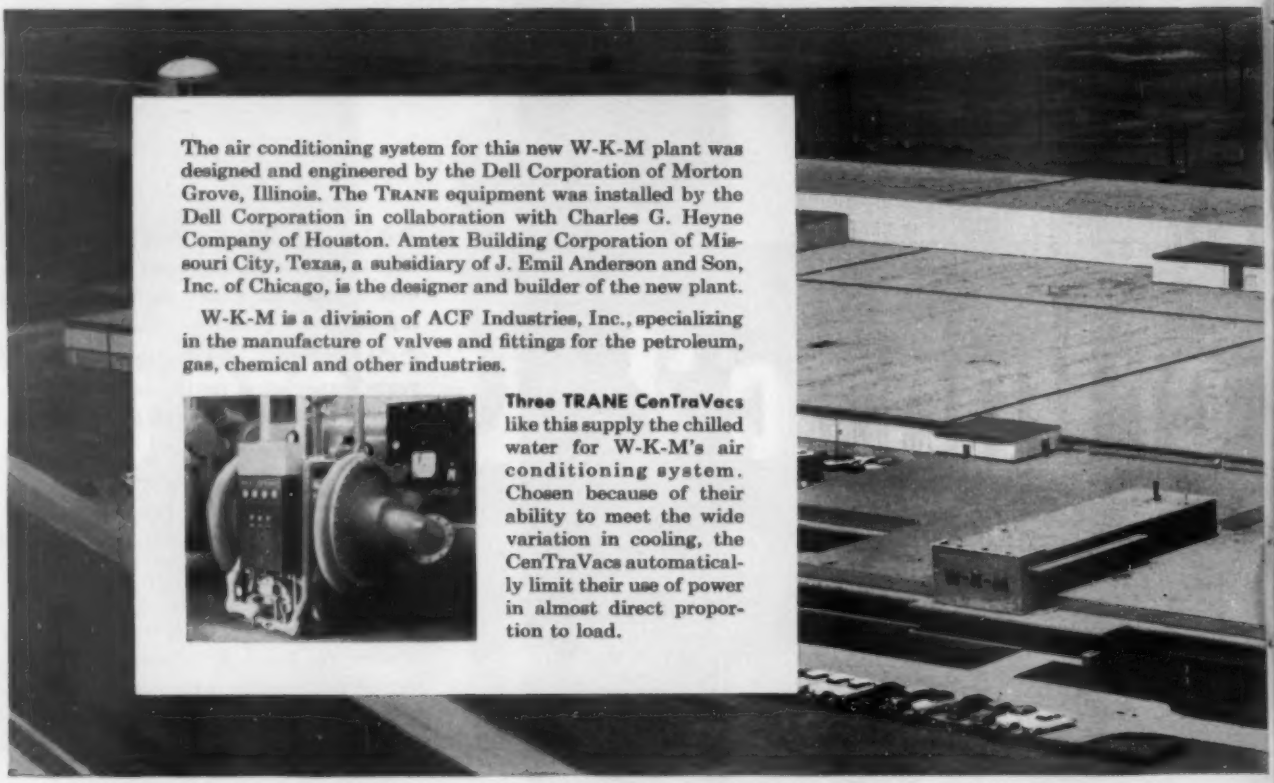
Your company, large or small, may well profit from UNIVAC—if not through purchase, then through lease of equipment or use of our Computing Center services. For further information, write on your business letterhead to Room 1453, 315 Fourth Ave., New York 10, New York.



UNIVAC 60 & 120—For speeding and simplifying the procedures of punched-card systems.

Remington Rand Univac
DIVISION OF SPERRY RAND CORPORATION

Air conditioned 98%* peak production



The air conditioning system for this new W-K-M plant was designed and engineered by the Dell Corporation of Morton Grove, Illinois. The TRANE equipment was installed by the Dell Corporation in collaboration with Charles G. Heyne Company of Houston. Amtex Building Corporation of Missouri City, Texas, a subsidiary of J. Emil Anderson and Son, Inc. of Chicago, is the designer and builder of the new plant.

W-K-M is a division of ACF Industries, Inc., specializing in the manufacture of valves and fittings for the petroleum, gas, chemical and other industries.

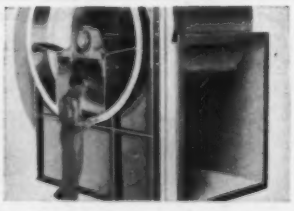
Three TRANE CenTraVacs like this supply the chilled water for W-K-M's air conditioning system. Chosen because of their ability to meet the wide variation in cooling, the CenTraVacs automatically limit their use of power in almost direct proportion to load.

. . . *because Trane changes*

Here's a new, modern factory building that's *comfort air conditioned* for "peak efficiency weather" in every season of the year! It's the Houston, Texas plant of W-K-M division of ACF Industries, Incorporated. This almost windowless, single-story factory occupies 12 acres in a 75-acre site . . . almost every square foot air conditioned for ideal working conditions.

To provide this "high production climate," W-K-M installed a 2,250-ton TRANE air conditioning system that uses chilled water in summer, hot water in winter—both circulated through the same piping system. The TRANE equipment is regulated by an electronic control system to maintain efficient summer or winter temperature in every area of the plant. Quiet, efficient and economical, the

TRANE . . . SKILLED IN ALL 4 RELATED FIELDS OF . . . .



AIR CONDITIONING

For year 'round heating and cooling systems, TRANE Coils and TRANE Fans (above) temper and circulate air for comfort or process climates.



HEATING

In the home, TRANE Convectors heat where cold begins, under windows, along outer walls; surround you with gentle, even warmth.

--this factory's set for all year 'round...



climates to order

TRANE equipment provides every employee—in the factory and in the office—with a climate in which he can do *more* work . . . *better* work, every day of the year!

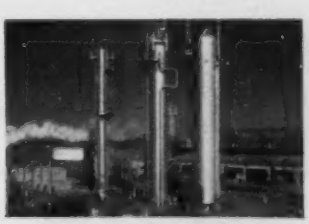
Every day, in widely divergent fields, TRANE equipment is changing climates to order—air conditioning buses and trains, ships and planes, giant office buildings and modest corner stores. TRANE equipment heats and cools factories and schools, hotels and homes—serves everywhere that you find air. For human comfort or industrial processing—*for any air condition*—turn to TRANE. See your nearest TRANE Sales Office or write TRANE, La Crosse, Wisconsin.

*Factory is comfort air conditioned throughout except for a special heat treating area amounting to about 1.6% of the total plant area.



VENTILATING

For modern schools, with their sweeping walls of windows, TRANE Unit Ventilators eliminate icy downdrafts, circulate air evenly.



HEAT TRANSFER

In modern chemical plants, TRANE Brazed Aluminum Heat Exchangers help purify gases at temperatures as low as 300° below zero!

For any air condition, turn to

TRANE

MANUFACTURING ENGINEERS OF AIR CONDITIONING, HEATING, VENTILATING AND HEAT TRANSFER EQUIPMENT

THE TRANE COMPANY, LA CROSSE, WIS. • EASTERN MFG. DIV., SCRANTON, PA.
TRANE COMPANY OF CANADA, LTD., TORONTO • 90 U. S. AND 19 CANADIAN OFFICES

"WE USE FIRESTONE TUBELESS TRUCK TIRES ON THE TOUGHEST RUN IN THE COUNTRY"

says Tom Rafael, Vice-President in Charge of Equipment and Maintenance for Western Truck Lines, Ltd.

From San Francisco to Dallas, over the mountains at −20°F.—into the desert at 105°F.—a typical trip for Western Truck Lines, now standardizing on Firestone Tubeless Truck Tires.

"We run tubed and tubeless together all the time, which is making our changeover a simple matter," states Tom Rafael. Tom's shown here with his bosses, Dick Cantlay (left) and Joe Tanzola, co-owners of Western Truck Lines, Ltd. and its subsidiaries, Gillette Motor Transport, and Cantlay & Tanzola.





"Less down time, less road delay, so we can give better service." George Buron, line driver for Western, agrees with Tom Rafael that Firestone tubeless are much more dependable on the road. "They run cooler out on the desert, too," reports George.

In an on-the-spot interview at the Los Angeles terminal of Western Truck Lines, Tom Rafael, who heads up the company's entire fleet operation, was asked:

Q. ***Why is your company switching to Firestone tubeless truck tires?***

A. We're in a service business; our success depends on the service we give our customers; Firestone tubeless tires permit us to give better service. It's as simple as that. And our trips are made on what we believe is the toughest run in the country, from the West Coast to Dallas, Kansas City and Houston.

Q. ***This is obviously a busy outfit—just how many miles do you log in a month, Mr. Rafael?***

A. It figures out about this way: Western Truck Lines will run up 1,200,000 miles. Then you can figure our two subsidiaries at 600,000 miles each, which totals up to 2,400,000 miles per month.

Q. ***With mileage like that, any tire savings should really show up. What is your tire cost picture?***

A. Firestone tubeless tires certainly give us better mileage at lower cost than tubed tires. And then, this Firestone rim and tire lighten the rig for bigger payload—26 pounds per wheel, and that adds up. We also have less wheel failure—haven't had a cracked one yet, in fact. So, with our payload up and our maintenance costs down, you can see why we're so sold on Firestone tubeless truck tires!



"This simplified tubeless rim assembly makes everybody happy." To Carl Pomo (kneeling), tire man for Western, this means less maintenance, easier and safer tire changing. And to Tom Rafael (shirt sleeves) the 26 pounds per wheel saved means more payload. For Jim Evans (right), Firestone's West Coast Truck Tire Sales Manager, it's another happy addition to the growing list of success stories for Firestone tubeless truck tires.



Firestone ***BETTER RUBBER FROM START TO FINISH***

Copyright 1957, The Firestone Tire & Rubber Company

Enjoy the Voice of Firestone on radio and television every Monday evening over ABC.

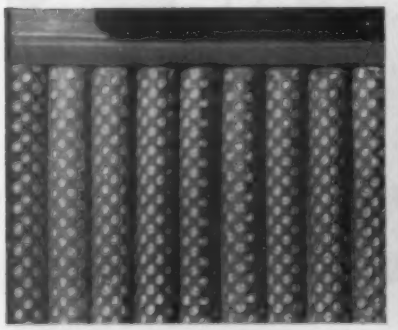


Get more work from your

NEW TG EXIDE-



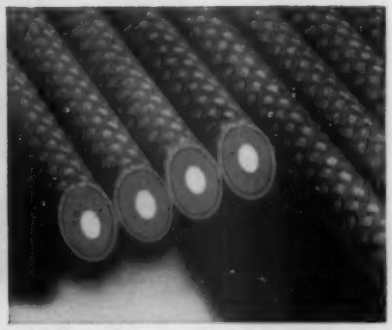
NEW POSITIVE AND NEGATIVE PLATES – DEVELOPED



New tubular construction of positive plate! Armored porous tubing. Provides resistance to corrosion and effects of vibration, improved flexibility, and maximum retention of active material. Thousands of tiny openings mean...



Greater porosity. Highly permeable tubes ease current flow, reduce internal resistance, improve access of electrolyte. Battery will deliver more power to meet sudden heavy loads. Tubes hold ...



More active material. Chief source of battery power. Larger inside diameter of tubes means every positive plate contains more active material per cubic inch of plate. And for maximum capacity and long life, there's a ...

electric industrial trucks

IRONCLAD BATTERY

Want more work hours—no increase in battery size? You get 44% more capacity in the new TG Exide-Ironclad Battery. For example, you can replace a 500 ah battery with a 720—in the same size. This means your trucks can do more work. They can earn a great deal more on your investment in them.

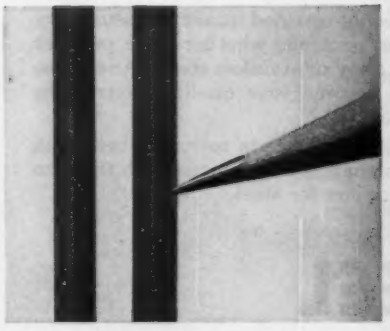
Satisfied with the work capacity of your present battery? Then get it at the lowest cost to own and operate—and get the newest, most advanced electric industrial truck on the market today.

Packs 44% more power into same battery space . . . priced to give you even greater battery economy

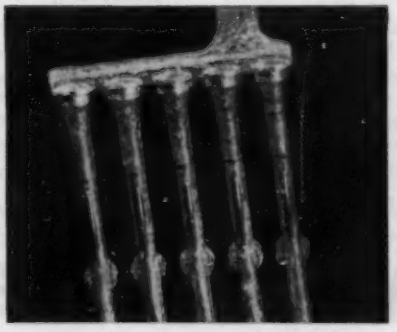
Want even lower operating cost and improved performance from your electric industrial trucks? Here Exide makes it possible. The new TG Exide-Ironclad Battery combines challenging new materials with an ingenious overall new design to produce the highest capacity per cubic inch of any battery available today. It's the most dramatic increase in capacity and the biggest step forward in power per dollar in history. This new battery can benefit every user of electric industrial trucks.

Learn more about the operating and expense advantages. Call your nearby regional Exide representative. Or write for complete information. Exide Industrial Division, The Electric Storage Battery Company, Philadelphia 1, Pa.

OUT OF RESEARCH STARTED 15 YEARS AGO



Thicker negative plate. Specially designed to match the increased capacity of the new positive plates. Plate is both thicker and stronger and possesses better electrical characteristics. You get all these advantages . . .



Plus Silvium,* Exide's exclusive grid alloy—proved more corrosion resistant than other leading grid alloys. Silvium is a patented combination of metals designed to prolong battery life. **U.S. patent*

Exide®

The Electric Storage Battery Company



REPORT TO TOP MANAGEMENT

These sparks reveal vital facts about quality control of steel

You probably leave details of quality control to others. But you *are* naturally interested in the quality of your finished products—and if you use steel in making them, you should know about the Ryerson quality controls symbolized by this spark test.

Here a skilled Ryerson inspector is checking the carbon content of a steel bar by "reading" the sparks thrown off by an abrasive wheel. It's an amazingly accurate method of making sure that you get exactly the steel you order.

And this is only one of many rigid quality controls that protect you in every purchase of steel from Ryerson stocks. For example, a heat symbol identifies every bar of alloy steel to avoid the problem of variation from heat to heat. Another example: cylinder tubing can be furnished to more accurate inside diameter through Ryerson specs controlling O. D. and I. D. instead of O. D. and wall.

The result: steel of certified quality—assured by exacting Ryerson controls, whether your product calls for carbon, alloy or stainless steels. And these quality controls become *your* quality controls in your finished product.

These are important points to remember when you are discussing purchasing policies with the men who place your orders for steel.

RYERSON STEEL

In stock: Carbon, alloy and stainless steel—bars, structurals, plates, sheets, tubing, industrial plastics, machinery & tools, etc.

JOSEPH T. RYERSON & SON, INC. PLANTS AT: NEW YORK • BOSTON • WALLINGFORD, CONN. • PHILADELPHIA • CHARLOTTE • CINCINNATI
CLEVELAND • DETROIT • PITTSBURGH • BUFFALO • CHICAGO • MILWAUKEE • ST. LOUIS • LOS ANGELES • SAN FRANCISCO • SPOKANE • SEATTLE

BUSINESS OUTLOOK

BUSINESS WEEK
APR. 6, 1957



Business, over-all, is acting very much as it did a year ago:

Soft spots here and there, a few **layoffs**, a certain amount of **price weakness** in industrial raw materials, and a bothersome **uncertainty** over the consumer's mood and the prospects for "the spring upturn."

Meantime, the boom lacks one prop it had last year: Then we were accumulating inventory, now we are liquidating (or trying to).

Actually, for all the publicity, **layoffs this year seem to count up less than they did in late winter and early spring last year.**

Apparently they are spread wider but thinner. And this year's auto industry cut has been much less, so far, than in 1956 (mainly because the problem of dealer inventory isn't so acute).

High government spending may not be the most desirable of all business backstops. Yet it provides a cushion that at times can be welcome—and this seems to be one of the times (page 46).

Mounting government outlays currently provide our main plus.

On the other hand, it could be this wouldn't even be needed but for the big March-April tax bite. This certainly does much to create **a bumpy pattern for spring**, a feeling of poverty amidst plenty.

—•—

Inflation is among the least of the burdens on the spring breezes these days—even though it is quite true the Consumers' Price Index has marched to new highs in each of the last eight months.

Wholesale prices in general stopped rising two months ago. That put an end to a 14-month-old upswing.

Prices of manufactured goods at wholesale also have leveled off (interrupting, in this case, a rise that was more than two years old).

Wholesale prices have been reflecting, in their laggard way, a turnabout that came considerably earlier in **primary markets.** These products—fibers, foodstuffs, metals—hit their peak at the end of November; since then, **they have been sliding rather rapidly.**

The most notable weakness has been in industrial raw materials.

Consumers haven't yet felt the stabilizing in prices for several reasons (some of them quite simple and others fairly complicated):

- **Meats and fresh fruits and vegetables** have been rising because this is the time of year when they are in shortest supply.
- **Manufactured goods** haven't leveled out because the farther you get from the factory, the more labor and distribution costs you pay.
- **Services** (medical expenses, personal care, transportation, and so on) go on rising quite oblivious to lower prices for commodities.

Rent is one item of family expense that shows signs of leveling off after its almost uninterrupted post-war zoom. Its level in the cost-of-living index has been unchanged for the last two months.

This week's upturn in the copper market hardly qualifies as a major exception to the calmer price trend. The flurry was **entirely due to strikes** that closed major producers in Chile and Rhodesia.

Nevertheless, it succeeded in bringing about some long-absent buying interest in the red metal.

This was a welcome change in the copper trade. It averted what had loomed as a major test of the 32¢-a-lb. price that major producers in the U. S. had been trying to hold. Two weeks ago, it had been felt that a sag to 30¢ was not at all unlikely (BW—Mar.23'57,p36).

—•—

Steel scrap prices aren't a sure-fire barometer of things to come in the steel industry, but they have been this time. Starting to slide early in December (they've dropped about $25 a ton from the $67 high), they foreshadowed a dip in operations that now amounts to 8%.

You can pretty well tell how much **layoffs in manufacturing** amount to by watching the weekly reports on unemployment compensation.

• New claims in March were **no higher than a year ago,** a distinct improvement from comparisons in January and February. These claims represent the people newly out of work, many of whom get new jobs or are recalled to their old ones before drawing compensation.

• Insured unemployment—those who have remained jobless long enough to start collecting—is **down about 140,000 from the year's high.** And, though it still is above 1956, the margin is narrowing.

—•—

Factories turning out **durable goods** have been eating into their **order backlogs** so far this year.

This is due mainly to the fact that the value of goods shipped has been higher than ever before.

Nevertheless it is also true that **new orders (seasonally adjusted) have declined each month since November** and lag year-ago levels.

Manufacturers of hardgoods as a whole **can well afford, of course, to cut into backlogs quite substantially.**

Business on their books still totals nearly $59-billion.

That's equivalent to four months' shipments even at the recent high rate. But it is about $650-million below the high last September.

—•—

Manufacturers' efforts to reduce their inventories apparently will show for the first time in March figures when these become available about a month from now.

During February, about the best that could be accomplished was a slowing of the rise that had gone on for about a year and a half. And even February's small increase carried the book value of inventories in all manufacturing above $52-billion for the first time.

—•—

Furniture, like appliances, seems to be showing belated effects of the **decline in housing.** The National Assn. of Furniture Manufacturers reports January-February shipments 5% below the same 1956 period.

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here too...

SHARONSTEEL *quality stands out*



COAL AND COKE

The rigid control of all facets of steelmaking—from coal mining and coke making to final shipping—by men of unsurpassed experience—has been mainly responsible for the extra high product quality that has come to be expected from Sharon.

SHARONSTEEL *For 56 Years a Quality Name in Steel*

SHARON STEEL CORPORATION, SHARON, PENNSYLVANIA

CHICAGO, CINCINNATI, CLEVELAND, DAYTON, DETROIT, GRAND RAPIDS, INDIANAPOLIS, LOS ANGELES, MILWAUKEE, NEW YORK, PHILADELPHIA, ROCHESTER, SAN FRANCISCO, MONTREAL, TORONTO

Which Diesel is out in



It's GM... Choice of over 150 equipment builders... and here's why:

When farmers single out one make of Diesel for leadership it is not by accident. Today General Motors Detroit Diesel engines handle more different kinds of heavy-duty farm work than any other.

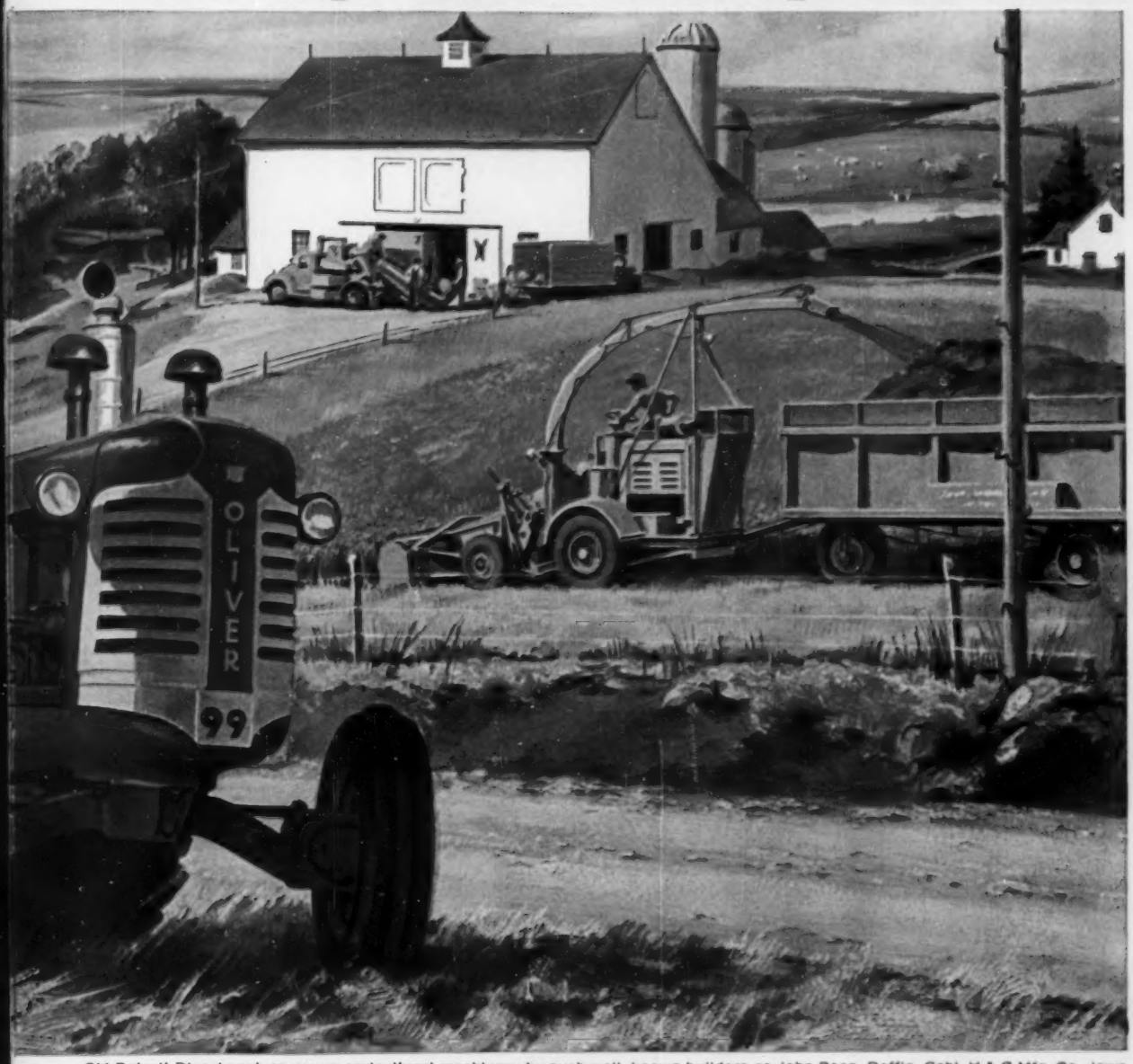
That's because experience proves these versatile Diesels cost less to operate, less to maintain, and get work done faster than other engines, both gasoline and Diesel, on jobs from 30 h.p. up.

Former gasoline tractor owners report that new GM Diesel-powered machines cut plowing time in half and reduce fuel costs as much as 60%—*saving up to $1,000 a year on fuel for one tractor.*

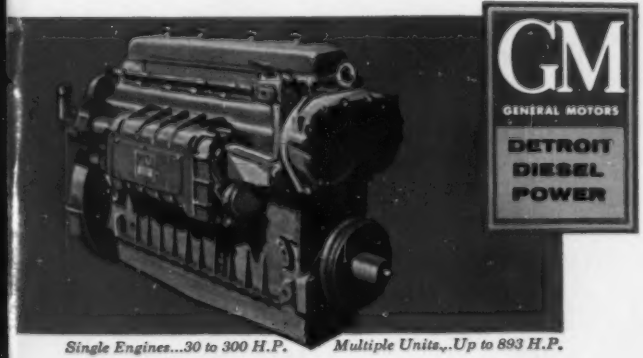
And these quicker-accelerating 2-cycle Diesels also bring unmatched economy to trucks, drainage and irrigation pumps, harvesters, tillers, threshers, feed grinders, corn shellers, cotton gins, orchard sprayers, and "stand-by" or "off-line" electric generators.

Write today for booklet listing over 1,000 applications of GM Detroit Diesel engines in power equipment. It's America's FIRST CHOICE Diesel *because it does more work at less cost!*

front by a country mile?



GM Detroit Diesel engines power agricultural machinery by such well-known builders as John Bean, Daffin, Gehl, H & G Mfg. Co., Iowa Portable, Melroe, Oliver, Seaman-Andwall, J. B. Sedberry, Sutorbilt, Thomson Machinery. Also shown, Austin-Western Power-Grader.



Single Engines...30 to 300 H.P. *Multiple Units...Up to 893 H.P.*

DETROIT DIESEL

Engine Division of General Motors

Detroit 28, Michigan

Regional Offices:
New York, Atlanta, Detroit, Chicago, Dallas, San Francisco

In Canada:
GENERAL MOTORS DIESEL LIMITED, London, Ontario

America's First Choice Diesel Engine

ENJAY BUTYL fabulous new rubber

Better boots, hose, and tires for today's farms



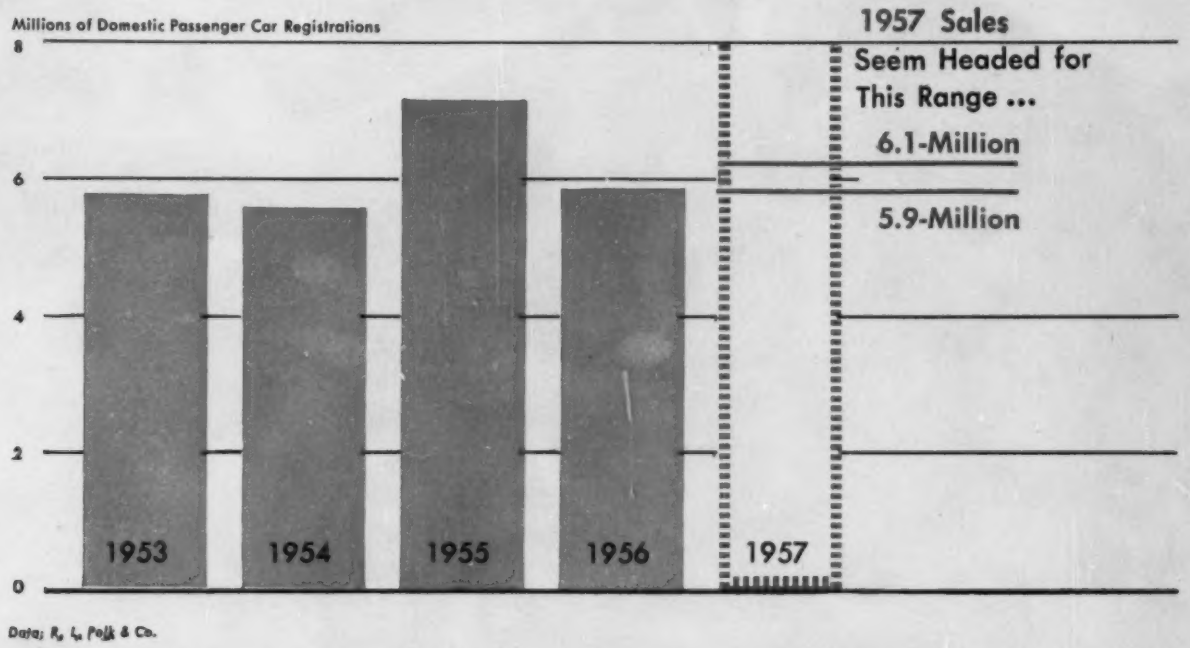
Things last longer on the farm these days, thanks to Enjay Butyl rubber. Farmers and dairymen wear boots that resist chemicals, abrasion, and deterioration. They ride on tractor tires that withstand rough use and aging . . . use hose that neither animal and vegetable fats nor heat and cold can damage. Because it out-performs natural and other types of rubber in so many ways, Enjay Butyl has become a familiar sight in everyday living.

ENJAY BUTYL

ENJAY COMPANY, INC., 15 West 51st St., New York 19, N. Y.
Other Offices: Akron · Boston · Chicago · Los Angeles · New Orleans · Tulsa

BUSINESS WEEK

APRIL 6, 1957
NUMBER 1440



Data: R. L. Polk & Co.

The Auto Sales Year Shapes Up

Detroit is finally giving up hope of a spring rush—this year and perhaps ever after. The seasonal factor in buying seems to have evaporated.

Although first-quarter sales actually ran behind disappointing 1956, April is poised to catch up. And the industry counts on all-new General Motors models in the fall to bring the year ahead.

BY THIS WEEK you can at last begin to chart the kind of year 1957 is turning out to be for the auto industry—and, as always, that tells you a lot about how the year will be for all business.

Talking to auto dealers all over the country and to the industry analysts in Detroit, looking at the figures, BUSINESS WEEK reporters find this pattern:

• Auto sales in 1957 will be better than in 1956—but by no more than 4% or 5%.

• The familiar pattern of a surging spring upturn in sales will not appear this year. April will show no more than a modest 10% increase over March. This repeats the 1956 experience, when no spring sales rush ever showed up, and it makes auto men wonder if the seasonal factors in their trade are changing.

• The 1957 market is made up of cagey dollar-conscious customers who aren't easy to sell.

• The 1957 market is a distorted one that can easily deceive the unwary analyst. Half the business—the General Motors half—is suffering, compared with last year. The other half is doing substantially better.

• **Down Over-All**—This last point accounts for a notable paradox in the auto situation today. A majority of dealers are optimistic and finding business good. But the over-all industry statistics are down from last year. Ward's Automotive Reports show dealer deliveries in the first quarter of only 1,484,000, compared with first-quarter deliveries of 1,573,000 cars last year.

What this seems to mean is that some of the people who would normally be buyers of General Motors cars have switched to other makes, but that others are waiting for GM's 1958 models. And that points to this sort of prospect: April business looks to be enough better than April, 1956, to bring the totals even with last year. They should stay about even through the summer. Come fall, General Motors will bring out its radically changed 1958 models, and that should bring into the market enough loyal GM customers to push sales for the year as a whole neatly ahead of 1956—maybe to as much as 6.1-million.

I. The Kind of Market

"The people can do without all this 'hair-curling' talk," snaps a Philadelphia dealer. In the Southwest, Los Angeles, and San Francisco, dealers



also comment bitterly on the Hoover-Humphrey statements about the danger of a depression. Yet in many places where dealers single out lack of public confidence as a sales deterrent, sales aren't so bad.

In Los Angeles, for example, only four out of 17 dealers reported any kind of sales slump. The others talked about increases ranging from 30% over the 1956 quarter to 30% over the previous week. In Phoenix, another city where dealers referred to the Hoover speech, not one of six retailers reported sales off. One dealer was up only 3% for the year, but another reported a jump of 35% over last year.

• **Holdouts**—"People are scared," says a Ford dealer in Philadelphia. "Those who are already managing to meet car payments are willing to take on a little more debt for a year or so longer. But the guys with clear titles are afraid to get into debt again—they're hanging onto their old, but paid-for, buggies."

You get this sort of reaction in Seattle, too, although it is pegged to another factor that keeps cropping up in dealers' conversation: the hangover from 1955. An Oldsmobile salesman tells about phoning former customers, only to be told, "I'm all through paying for that '55 car, and I'm going to stick with it." And a Ford dealer says he gets a similar response from a man with a 1955 Ford station wagon: "It's all paid for; it's going to have to last."

Citywide registrations in Seattle for January and February are off 9% from a year ago, but a lot of this is accounted for by a 48% drop in Buick sales.

• **Prevailing Views**—The new consumer conservatism that dealers in Philadelphia and Seattle report is summed up by a dealer in Bangor, Me. "There have been too many cars built," he says flatly. "The new car market cannot expand." In his city, sales are steady.

In Syracuse, a dealer comes closer to the prevailing Detroit opinion on the seasonal angle. "The spring upturn," he says, "is less noticeable than it used to be, because sales hold up throughout the year." He sells Chryslers and Plymouths—which all dealers report to be in short supply. That may be an additional reason why his sales have been at about the same level all year.

His hunch about the lack of a seasonal upturn is what Detroit experts themselves are coming to believe. Notions die hard in Detroit. The notion that there always will be a spring upswing is dying harder than others, because this would mean a thorough revamping of the business and a change in the employment cycle. Still, by early this week there was very little hope left in Detroit that there would be a major seasonal surge.

• **Expert Opinion**—But accepting a fact is not explaining it. Detroit marketing men are frankly baffled by the disappearance of the seasonal nature of the business. One says it is due to moving the income tax date to Apr. 15, right in the middle of the old seasonal boom.

Some deep-thinking economists in the Motor City believe that automotive technology and the changed pattern of our culture have outmoded a great seasonal upturn. Today's cars are all-weather vehicles, they point out. In the North—the country's major population centers—they are used in winter just as freely as in the South. That wasn't true 30 years ago.

To test the theory, analysts have charted sales in selected Southern zones in ratio to sales in selected Northern zones for five prewar years



and five postwar years. In prewar years, the chartline zoomed up 200% from December to April. In the past five years, the widest swing was about 50% in 1954, and in the past two years, the curve has moved in the very narrow range of roughly 20%.

II. It's a Trading Business

"People are thieves these days," a Pittsburgh Chevrolet dealer grumps. He's discounting about $600 from the suggested list price—comparable to what he gave in December, January, and February—but, he says, "you can only reach a certain point."

What that certain point is can be seen in the nature of the industry's pricing system (chart, page 61), which permits a dealer to offer such a large amount off "list." The "secret"—and dealers will tell you bitterly it is no longer a secret from the buyer—is that the dealer's margin is put high enough at the start to permit him to offer huge discounts to spur sales in the spring and fall. That's exactly what is going on now—but the dealers have to treat with a far more sophisticated customer.

• **Knowing Shoppers**—In Cleveland, a Chevrolet dealer insists that the customer, not the salesman, is the expert on cars these days. "Don't tell me about horsepower and comfort," says the customer. "Just tell me how much you will give me for my car."

And an Olds dealer explains: "The biggest problem of the automobile industry is to get its pricing back to normal. Nobody pays $5,000 for a $5,000 car any more."

Says a Dodge-Plymouth dealer in Miami: "Everybody's educated to shop. Two-thirds of our customers used to be repeaters. Now 95% come in with two or three other deals we've got to beat."

• **Price Factor**—The retailers themselves are split widely on whether the price increases on the 1957 cars have deterred sales and whether price cuts would help.

To begin with, there is no unanimity among dealers on whether the price increases at the factory have actually resulted in price increases at the retail level. Because of local competitive situations in some areas, dealers have had to discount heavily.

Some dealers like to dream about a price cut that would kick up sales, but most are realistic. It would take a cut of at least $200 to do any good, and the competition would cut, too, so nothing really would be changed.

There is some feeling that there's price resistance, but this doesn't necessarily mean lost sales—it means a different kind of sale.

"The price of the low-priced three now compares with the Olds-Buick-Mercury price of three years ago," says a Seattle Ford dealer. A Mercury dealer adds: "In the middle price field, our potential has shrunk. The public is equipment-minded. Rather than buy a larger car without all the power equipment, a man will drop down into the low-priced three."

But the average dealer shrugs off the price increase. As a Fort Worth dealer says, "We feel that the pressure of higher prices is more in the matter of terms than in sales."

III. Stretching Credit Terms

With a few exceptions, the length of credit terms is creeping up all over the country. A 36-month deal caused raised eyebrows last year. It doesn't any more, for it is becoming the accepted thing. In Detroit and elsewhere, dealers report that General Motors Acceptance Corp.—the most conservative of the finance agencies—has begun to take 36-month paper. Reason for extending the term: It absorbs the higher price, dealers say.

• **Borrowing Future Sales**—"We have to let a man have 36 months to pay in a lot of cases," reports a Fort Worth Chevrolet dealer, "because he can't handle the payments on the increased price range in 30 months. But we normally offer only 30 months, because we've learned, the hard way, that 36-month deals cut sales in the future."

His last point is echoed frequently, particularly in reference to the long-term-credit sales of 1955. Many dealers mourn because the easy credit of that year has resulted in a host of owners with too little equity in their cars to be in the market this year.

• **Conflicting Courses**—Another peculiarity is the lack of any credit pattern. In both Des Moines and the Kansas City area, for example, income is down and sales are poor. In an attempt to shake buyers out of the woods, Des Moines dealers are giving up to 42 months to pay. In Kansas City, however, terms are tightening.

"If you get a deal that looks good," says a Kansas City dealer, "you may go as high as 30 months, but that is about all. Thirty-six months is too long."

• **Less Finance Profit**—Along with the trend toward longer terms goes another trend that gives the dealers more concern. Banks have moved into auto financing in a big way. In Houston, two dealers credited this situation with the fact they are losing money. The customers are finding out, say the dealers, that they can save money at the banks.

There are a number of ways this can work out. A dealer who does his own financing—and thousands do—borrows his money at 6% and lends it at rates ranging up to 36%. Then there is the "finance reserve" of a dealer. This is the 1% or 1½% of the loan that is retained by the lending agency as insurance against repossession losses. What's left in the fund at the end of the year is returned to the dealer. Often it is a substantial part of the dealer's profit. When a customer doesn't finance through the dealer, there is no gain.

• **Selling Terms**—In 1955, dealers were selling terms; last year they were selling price. This year they seem to be selling monthly terms.

In Atlanta, a dealer says: "All the customer is really concerned about is whether he can get the payments down to where he can make them each month. He probably isn't even sure what the total amount of the debt will be—all he's worried about is the monthly deal."

• **Tightening Up**—But it is not a general trend. Chicago lending agencies appeared to have tightened up more than any others. A Chevrolet dealer says: "The finance companies already have heavy collection problems and won't back up anyone who hasn't got a good credit rating. And banks won't back anyone who's trying to buy over his head, regardless of credit rating. This realistic approach is great for the economy, and lousy for the dealer."



SPONSOR Elmer Winter checks in the 38 paintings entered by businessmen-artists in his Milwaukee art show.



INDUSTRIAL design instructor Taizo Miake (right) and Layton School students map out placing and lighting of art works.



AT PREVIEW, students and art critics mill through the school gallery. Later, the show will take to the road on a two-year tour of some of the biggest U. S. cities.

The Boss

Art exhibit in Milwaukee proves that more and more businessmen are taking to the brush and easel to counteract tensions.

"I TURNED to painting to avoid the danger of becoming a human UNIVAC," says Elmer Winter, president of Manpower, Inc., a Milwaukee business service specializing in temporary help. After three years of communing with his muse, Winter feels he has routed the specter. Now he's converting other harried executives to this safety valve.

To show that businessmen turned artists are something more than mere hobbyists, Winter conceived and is sponsoring an exhibit, called From the Executive's Easel, that has some of the



Shows His Masterpiece

best in painting of industrialists and professional people.

The exhibit of 38 paintings is being previewed this week at the Layton School of Art in Milwaukee. Its first official showing is slated for June 15 at Chicago's Merchandise Mart. After that, it will start on a two-year tour of the U.S. under the direction of the American Federation of Arts. Museums in such cities as Dallas, San Francisco, and New Orleans have already booked the show.

The exhibitors are in nearly every field of business: manufacturing, banking, retailing, garments, contracting, hotels, insurance, petroleum, and medicine. Their paintings, selected by several leading museum directors, are just as varied. The styles are impressionistic, primitive, and non-objective.

As has been demonstrated in other such exhibits, including the one staged by the packing industry (BW—Apr.14 '51,p22), the subjects businessmen paint don't vary much from those of professional artists. They paint what they see around them or what comes through their mind's eye. At the Milwaukee show, only one category is conspicuous by its absence. Not a nude showed up, although nudes were not barred from the show.

Winter feels that any businessman can find enjoyment and satisfaction in painting, whatever his artistic limitations. He says the monotony of a business trip can be broken by an hour or two painting an old fishing wharf or a complex of city buildings. But he warned against becoming too secluded. "Art should be a group activity."



NORTHERN LAND, a study in oils, was entered by Dr. Joseph A. Falzone, Jr., a research physician of Baltimore.



THE WEDDING, an oil, is by Leo Schutzman, retired president of Victory Undergarment Co. of Brooklyn.

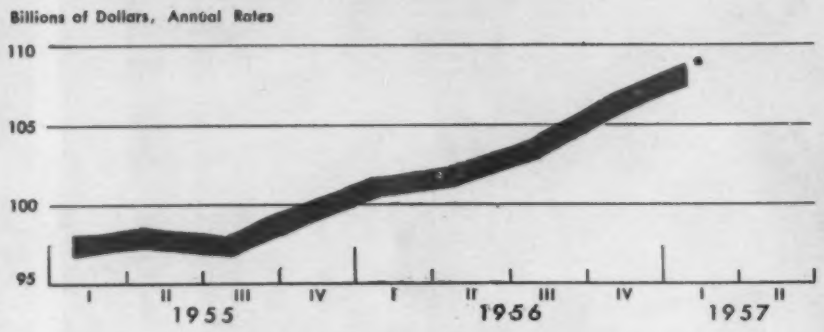


SHIPWRECK, also in oils, was painted by Milton P. Mathewson, sales manager of La Salle Hotel in Chicago.

From Local School to Pentagon,

TURNING UP:

Outlays by all government — federal, state, local



THE BIG RISES are in:

Federal defense purchases of goods and services



and

State and local purchases of goods and services



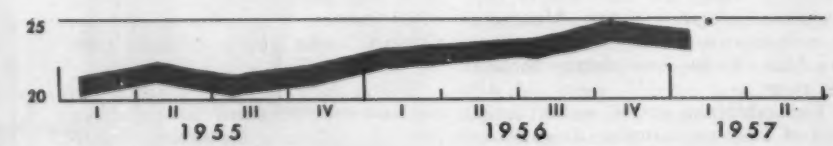
THERE'S A DROP in:

Other federal purchases of goods and services



SMALL GAINS in:

Direct payments to the public for social security, interest, subsidies



*BUSINESS WEEK Estimate

Data: Dept of Commerce.

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Government Spending Is Up

DESPITE SOME victories already won in Congress, the advocates of less government spending face a tough, uphill fight this session—and the charts on the opposite page show why. They reveal a persistent pattern of increase in almost every type of government expenditure.

The only way to measure the government sector of the economy adequately is to include all government outlays—as the charts do. Besides federal purchases of goods and services, this covers local and state government purchases, payments from the federal trust funds for social security (and, this year, for the new highway program), interest payments on government borrowings, and subsidies paid to special groups—chiefly farmers and operators of air and shipping lines.

I. Growing Pains All Over

Here's what you come up with:

• General government outlays are bigger than most people think. The $71.8-billion administrative budget presented by Pres. Eisenhower for the next fiscal year is only part of the problem. All told, government agencies—from local school boards to the Pentagon—are pumping out cash at a rate of $108-billion a year.

• This total for all government is growing—and not chiefly because of federal spending programs. All government outlays have gone up almost $11-billion in two years. Leading the parade is a jump of $4.2-billion in state and local purchases; federal purchases are a poor second with a rise of $2.8-billion (substantially all of it for the military); payments from government trust accounts—such as social security and the new highway fund—are a close third with a climb of $2-billion. And two of these leading gainers are beyond reach of the economy bloc in Congress.

• Up to the middle of last year, federal purchases were actually declining a bit. They were lower at that time than they had been 18 months before. Then came the general price rise, which plagues government budget cutters just as it does businessmen. Something like three-fourths of the $3.5-billion rise in the annual rate of government purchases the last nine months is due to price increases, mostly for military hardgoods. These higher price levels are not reflected adequately in the budget, and as a result, the military is sharply overspending its official goal. This means the economy bloc in Congress will have to slash programs heavily just to hold federal spending at the present level.

• **Keeping Pace**—This comprehensive approach to government spending reveals a curiously stable ratio between government outlays and the total economy. At the beginning of 1955, the government sector was 25% of gross national product; it is practically the same today. The economy, in short, has grown at the same rate as government in the past two years—a fact that defenders of government programs will find useful.

This method also shows whether the government sector as a whole is paying its way, or whether it is running a deficit. The federal administrative budget is expected to show a $1.7-billion surplus this fiscal year. But state and local governments are spending $1.7-billion more than they are collecting in taxes, because of public works projects financed by bond issues. The federal trust funds break this deadlock; they are collecting $2.4-billion more for social security and highway taxes than is being paid out, and this puts the government sector as a whole in the black.

II. Danger Area

The rise in military spending is one of the most troublesome problems to the economy bloc in Congress and to the Administration. White House officials fear it may even wipe out their hope for a surplus this year. Here's what's happening:

The official target for Defense Dept. spending is $36-billion this year for military functions. This is an increase of only $200-million over what was spent last year. But with the fiscal year two-thirds over, defense spending is already $1.5-billion higher than in the same period a year ago. Most of this is due to a combination of higher prices for goods and more expensive weapons.

It seems likely to increase, too, which means military spending will wind up the year somewhere over $37-billion. This poses a tough problem for the economy bloc. It can call for further efficiencies in operation, but to neutralize the effect of rising prices on military outlays substantially, it will have to cut programs. And when they try this, they will be opposed by Eisenhower, exactly where his voice carries the most weight.

• **Bright Spot**—There's a surprise for many critics of federal spending in non-defense expenditures. The net cost of public works, social services, and the like appears to be lower now than it was two years ago. Spending plans and new obligational authority for such items have been on the rise for a couple of years, but so far the actual rise in the outlay of dollars has been more than offset by receipts from the sale of surplus agricultural commodities held by the government. Actually, these sales represent a multi-billion-dollar loss to the government; prices received are less than the loans to farmers under which the government originally took title to the commodities. But the receipts nevertheless show on the Treasury's books as an offset to expenditures. Without them, non-defense federal spending would be running something like $200-million higher than a year ago.

III. Out of Reach

The rise in payments from federal trust funds is due mostly to increases in social security payments. Payments from the Old Age & Survivors Insurance Fund alone are increasing by some $900-million a year. This rise will continue into the foreseeable future. The newest of the trust funds—that for financing the modern federal highway system—is beginning to pump out cash at a rate of $300-million per quarter. This, too, will rise over the next several years. Congress has the power to hold back such payments if it wants to, but the trust funds are generally recognized by the economy bloc as being beyond their reach.

The rise in subsidy payments—small in dollars, but big in percentage points—is more easily controlled. The big increase that showed up in the fourth quarter of last year is mostly for payments to farmers for taking their land out of cultivation and putting it in the soil bank. So far the economy bloc shows no indication of attacking this outlay, though big city congressmen have defeated one effort this year to increase payments to farmers.

• **Wages Soar**—There was other bad news for the economy-minded this week. Sen. Harry F. Byrd (D-Va.), in his role as chairman of a watchdog spending committee, reported that the federal payroll is now running at a $1-billion per month rate, and that the amount being paid civilian employees is the highest on record.

In the meantime, the Administration is stepping up the defense of its budget requests. Two Cabinet members—Marion B. Folsom, Secretary of Health, Education & Welfare, and James P. Mitchell, Secretary of Labor—made strong protests against reductions in their spending plans. Partly as a result of these counterattacks, there were signs that the economy drive in the House, at least, was losing some of its steam. A $1.3-million cut in funds for the Food & Drug Administration now seems likely to be restored.

Decentralizing Russia's Economy

● Khrushchev proposes to delegate more authority to local and regional managers, to develop initiative.

● If he can do it, the Soviet economy will undergo the greatest change since the first Five Year Plan.

● But experts in Washington are skeptical. It's a large order—one that would dismay a business leader anywhere, let alone one in an authoritarian state.

Russia's strong man, Nikita Khrushchev, has taken the wraps off plans for the most sweeping reorganization of the Soviet economy since the first Five Year Plan in 1929.

His proposals, published last weekend, add up to an economic de-Stalinization on a scale comparable to the political de-Stalinization of last year. For Russia's leaders, they involve political risks of nearly the same magnitude. And to guard against the risks, there is certain to be a tightening of the central political authority.

• **More Enterprise**—The objective of the reorganization is to boost the efficiency and productivity of the Soviet economy by injecting more individual initiative and drive into it. If it is carried out, local managers and planners will get more responsibility, bureaucratic theoreticians in Moscow will have their powers clipped.

To accomplish this, Khrushchev proposes to:

• Scrap the 20-odd industrial ministries in Moscow that now control 200,000 industrial operations and 100,000 construction sites located throughout the sprawling Soviet Union.

• Set up "councils of national economy"—regional economic councils—throughout the country along the lines of the existing political divisions and subdivisions, rather than on a nationwide or industrywide basis.

I. Economic Rule

The regional economic councils would be directly responsible to the Council of Ministers in Moscow rather than to individual economic ministries as in the past. Industry ministers will be replaced in the Council of Ministers by the chairmen of the Councils of Ministers of the 15 Soviet republics.

The State Economic Commission, which has had charge of short-term planning, would be merged with the State Planning Commission (Gosplan), which has the responsibility for long-term plans.

This is a turnabout. Only last February, the State Economic Commission was beefed up and First Vice-Premier Mikhail G. Pervukhin was installed over it as a sort of economic czar. This was interpreted as a victory for the managerial class over the bureaucrats. Whether this victory is now being qualified will depend upon whether a political planner or a practical economic manager is appointed as chairman of the new Gosplan.

• **Fewer Middlemen**—The net effect sought in all this reshuffling is to pare out the fat layer of official middlemen between the factories and the dam sites, on the one hand, and the top economic planners and political bosses in Moscow, on the other. Under the plan, thousands of paper pushers in the capital would be exiled to the local economic councils—perhaps even to the factories and fields.

Over-all economic goals, of course, still would be set in Moscow by Gosplan, the Council of Ministers, and ultimately the Communist Party bosses. But local managers and planners would have a bigger say than before in setting the broad targets, and much greater power to decide how a general goal is to be implemented in their bailiwicks. This, in turn, would give them more power to ignore or defy the local Communist Party chiefs.

Khrushchev's proposals still are somewhat tentative. The Supreme Soviet has been summoned to meet May 7 to approve them. Between now and then there will be intense consultation at all levels of the Soviet ruling hierarchy, and some details may be changed. But it looks certain that the main lines of the plan will be approved.

• **Questions**—There are lots of blanks in the plans, too, from the point of view of Western observers. For instance, what changes in the personnel of the top economic leadership will result from the reorganization? Specifically, will the practical managers, like Pervukhin, come out on top, or will there be an attempt to hedge against the dangers of decentralization by giving back power to the political apparatus, with its doctrinaire party-line economists?

• **Cutting Red Tape**—Despite these uncertainties, it is clear that the Russian leaders are plunging into an all-out effort to strip the bureaucratic hobbles from the Soviet economy.

In the past, there have been numerous drives to decentralize economic planning, and considerable decentralization of light industry already has been carried out. But the Soviet high command has been afraid to delegate much real operating authority to its field officers.

II. Chances of Success

Whether this bold experiment in decentralization will work is another question. U.S. officials and experts on Russia are skeptical after a first reading of the outline as published in Pravda.

The sheer confusion that inevitably will be generated by such a massive reorganization is in itself likely to be a brake on Soviet economic expansion during a transition period. Experts guess it would take at least two or three years to carry out the change.

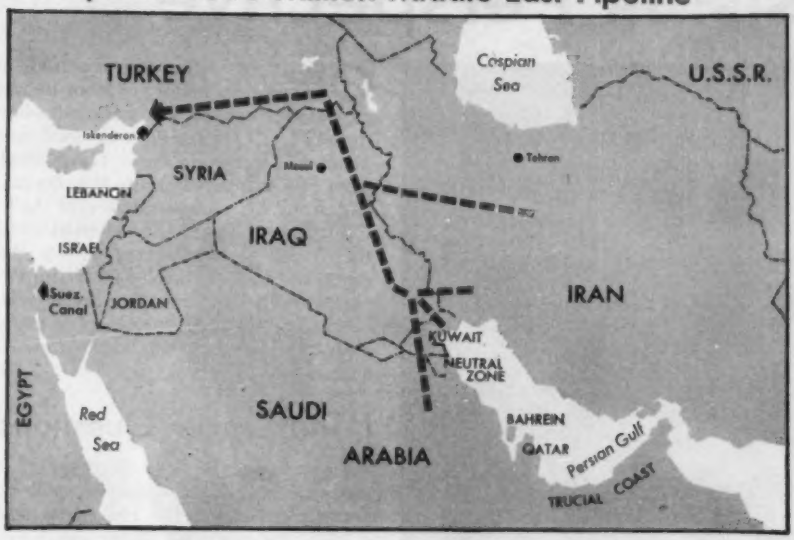
Managers of giant U.S. corporations that have carried out large-scale decentralization schemes know from their own experience the host of knotty problems and dislocations that are involved. But Khrushchev is trying to decentralize the second-largest economy in the world at one fell swoop—and he's starting from a long background of tight authoritarian economic controls.

• **Shock Effect**—Western observers doubt the Soviet Union has enough trained personnel capable of assuming real managerial responsibility at local levels to get Khrushchev's plans off paper.

Then, too, there is bound to be resentment and foot-dragging among the Moscow bureaucrats who are suddenly ordered to the provinces. They certainly will make every effort to find shelter in the offices of Gosplan and other central economic organizations. If they succeed to any large degree, the central bureaucracy might well survive under another name and continue to burden the economy.

What's more, most Russian experts in Washington believe that as long as the Soviet economy is oriented so heavily toward heavy industry, as long as good-quality consumer goods aren't plentifully available, as long as the consumers have no power to determine the amount or quality of the goods they receive for their labor—there can be no dramatic increase in the incentive to work in the Soviet Union.

Proposed $800-Million Middle East Pipeline



A Pipe to Rival Suez

It will be a monster job, but eight oil companies are planning a new pipeline to bring oil from Iraq, Iran, and the Persian Gulf to the Mediterranean.

THIS WEEK experts of eight major international oil companies were closeted in their home offices from Paris to San Francisco working out details for one of the most ambitious construction projects ever contemplated: an $800-million pipeline that would tie most of the existing and some new oilfields of the Middle East to a Turkish terminal on the Mediterranean (map).

The Middle East already has two major pipelines—the 100-mile-plus line of Aramco's Tapline links the Saudi Arabian fields to a terminal at Sidon, and Iraq Petroleum's lines move oil from its Mosul-Kirkuk fields to other ports on the Mediterranean. But the proposed line would dwarf these.

• **Magnitude**—You get some idea of its size if you examine a few figures. When Nasser grabbed the Suez Canal, a daily average of about 1.3-million bbl. of oil flowed through the canal. The new pipeline would move about 1-million bbl. of oil a day to market. That's much more than the total of all the other Middle East pipelines.

The proposed line would be built over rough terrain—it would have to hurtle the Turkish Taurus mountains—and would be a multi-company affair. It would stretch 1,200 miles, if the most ambitious plans are carried out, from the Saudi, Kuwaiti, and Iranian Consortium fields in the south, through the southern and northern Iraq fields and on through southeastern Turkey to the sea. The newly discovered fields south of Teheran (page 142) would also be brought into the system if the most inclusive version of the project goes through. At a minimum, the new line would link Iraq and the Mediterranean.

• **Complications**—The technical difficulties, while occupying the oil experts' attention at the moment, are only the beginning of the complications. Financing, even for companies like Jersey Standard, Texas, Gulf, Socony Mobil, California Standard, Royal Dutch Shell, British Petroleum, and Compagnie Francaise des Petroles, poses a problem. For while Tapline, completed in December, 1950, cost only about $109,000 a mile, the proposed new line will cost an estimated $400,000 per mile.

• **Legal Pitfalls**—Then there are legal complications. The oil companies—which are studiously eschewing government participation in financing—don't want to sink that kind of money in a project that would be subject to the whims of Arab and Middle East nationalism. The very reason for going ahead with the pipeline now—rather than at some later date when burgeoning European demand would have forced it—is Egyptian Pres. Nasser's stranglehold on the Suez Canal (page 134).

Then, too, any joint venture by private oil companies in a new pipeline raises the specter of U.S. antitrust prohibitions against collusive production, use, and price controls. But Justice Dept. officials this week hastened to add that joint ownership of a pipeline is not in itself a violation of the antitrust laws.

• **Political Problems**—It's too early to make any certain statements. But this week, BUSINESS WEEK learned the proposal goes something like this:

The eight companies are working on a joint plan to be brought up when they reconvene about the middle of May. The chief problem, at the moment, seems to be political: The most suitable terminus for the pipeline would be Iskenderon. But the city, once called Alexandretta, was taken from the Syrians by the Turks in 1928. The pro-Western Iraq government—while now the Turks' ally in the Baghdad Pact—does not want to offend its own Arab nationalists and the Syrians and thereby give Nasser another stick to beat it with by agreeing to the use of the port. A compromise will probably be worked out whereby the oil companies agree to use present pipelines flowing through Syria to their maximum capacity before oil is put through the new pipeline.

Another political problem is how to insure the "internationalization" of the pipeline. The formula now being worked out, which State Secy. Dulles apparently referred to in last week's press conference, would be an international treaty signed by both the oil-producing and oil-transiting countries. They would guarantee that neither would arbitrarily interfere with the line, might even come to some understanding about how the profits from oil production and the transit charges would be divided.

• **Technical Snags**—By comparison with these difficulties, building the line ought to be a snap. Present thinking calls for two 34-in. or 36-in. pipes negotiating the distance, although there's also talk of a single 40-in. and 42-in.

Pipe is likely to be the biggest materials bottleneck since it is in short supply all around the world. The oil would flow through Iran and Iraq by gravity, but as it neared the Mediterranean terminals in Turkey, pumping stations would boost it over the mountains.

• **Fund Raising**—To pay for all this—and port facilities in Turkey—the companies will have to dip into their reserves and also go to the market for funds. A possible source is the World Bank's offspring, the International Finance Corp.

With all these ifs and buts, it's difficult to predict when the project will be completed. But Jersey Standard Pres. Monroe J. Rathbone said this week the companies ought to be able to round out their plans by the end of the year, then take three or four years to build it.

Labor's Crisis: A Perspective



ONE OF THE MOST critical periods in the modern history of labor unions in America opened last weekend when the AFL-CIO Executive Council suspended Teamsters Pres. Dave Beck from his membership on the council and from his vice-presidency of AFL-CIO. Before labor's time of crisis ends, there will be revolutions within the union movement, there will be important effects in labor-management relations felt directly by employers in many industries, and there will be experiments with union regulation (page 157).

I. The Crucial Questions

From now through September, a series of immediate questions will be answered in ways that can shape and deepen labor's crisis. These questions, in the order in which they will be answered are:

Question 1: Will Beck pull the Teamsters out of AFL-CIO?

Question 2: Will the trial of Beck on May 20 by AFL-CIO lead to the Teamsters' expulsion?

If the answer to either of those questions is "yes," the Teamsters will become an independent union. But they will, by becoming independent, set in motion a train of unprecedented events. The United Mine Workers of America became independent on its own initiative. And the International Longshoremen's Assn. became independent through expulsion. But these unions simply went separate ways with no significant effect on other unions.

• **The Teamsters' Power**—The Teamsters' relations with other unions are, however, the most involved and important in the labor movement.

The Teamsters can help other unions. There are many unions that exist now only because, when they were started, the Teamsters gave them direct economic support by stopping transport to the employers they were organizing. And many unions win or lose a strike on the basis of truck drivers "recognizing" their picket lines.

Or the Teamsters can hurt other unions. With direct access by their members to more different workplaces than any other union, the Teamsters' opportunity for raiding is greater than any other organization's. Last year, for example, in St. Louis, they just grabbed a local of striking Sears, Roebuck repairmen from the electrical

WHAT HAPPENS to Teamsters' leaders Beck (left) and Hoffa (center) will affect all labor—and management, too.



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All revolves around the outstanding accident prevention program Fafnir set up with the help of American Mutual and which both companies have operated together ever since. Results have been a saving in lives, limbs and morale that has enhanced Fafnir's outstanding reputation as a good place to work. Savings in money, too! Just since 1950, for example, Fafnir has realized $363,274 in reduced insurance premiums (difference in manual rates for the industry and rate actually paid) as well as in dividends.

★ ★ ★

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*Mr. Friendly in American Mutual's trademark symbolizes the spirit of cooperation and service typical of American Mutual representatives everywhere.

workers and the IBEW was powerless to do anything about it. This kind of imperialism is not at all uncommon. If all ties of alliance with AFL-CIO are broken, it could become the Teamsters' principal tactic in a war of reprisal.

Question 3: Will James Hoffa be convicted on the bribery charge for which he is to be tried on May 27?

What happens to Hoffa is more important than what happens to Beck.

If Hoffa beats the rap he faces for trying to open up a channel of private information from the files of the McClellan committee, he will be invincible in the Teamsters. He may let Beck continue in the office of president, or take the job himself, or present it to Harold Gibbons, a St. Louis associate. In any event, it will make no difference. He will be the real boss of the union and any chance of reforming it from within will be dead.

Whatever hope the AFL-CIO has that its problem union may clean itself up rests largely on Hoffa's exit.

Question 4: What will the quinquennial convention of the Teamsters, set for next September, do?

Very little, probably.

In some ways, this is the easiest of the questions to answer because the composition of that convention is known. There will be little rank-and-file representation. It will be made up, largely, of local, regional, and national officers of the union—many of whom are smaller editions of Beck and Hoffa.

• **Loyal Lieutenants**—The two largest blocs in the union, the representatives of which will dominate the September meeting, are the Western States and Central States Conference. These two units are under the sovereignty of Frank Brewster and James Hoffa, respectively. And Hoffa's influence extends into New York and other Eastern states. The delegates from these areas have a dependence on, and a loyalty to, the two men in the union who, along with Beck, are prime examples of the need for reform.

There are a few oases of "independence." Cincinnati, Chicago, Pittsburgh, and Boston are sometimes numbered among them. Delegates from these cities, where there is a large membership, will be freer to stand against the leadership. But they will be a minority.

Another center of opposition to the three discredited officials exists around John F. English, the septuagenarian secretary-treasurer of the union. But he and his group represent a "palace opposition." They are not a reform party with any mass support.

• **Change Unlikely**—Thus, any looking toward the September convention for basic changes in Teamsters mores and morality is apt to be disappointing. The convention may make a series of gestures designed to placate aroused public opinion. But unless the Hoffa-Brewster power is broken beforehand, there will be no basic changes.

II. The Broader Crisis

Consequently the broad problems of union operation and the responsibilities of union leadership that the Teamsters union dramatizes will have to be solved elsewhere, if they are to be solved at all. This, as well as difficulties in the future relationship of other unions with the Teamsters, makes a crisis for all unions. And if Beck and his associates, and the whole union, were to disappear tomorrow without a trace, that crisis could not be averted.

The unions in America are at a crossroads, but they were not brought there in a sudden leap by either the McClellan committee or Dave Beck. They have come to it slowly, by building up power and using it, and by the pendulum-like movement of public opinion.

• **Benevolent Attitude**—During the great depression, it was widely believed that labor was getting the dirty end of the stick. A large amount of public sympathy for labor developed and when the new unions were established in the mass-employing industries, they did not evoke the same degree of community hostility that efforts to organize had evoked in the past. The Wagner Act, passed in 1935, had the support of bipartisan majorities in Congress.

With favorable legislation and public support, both the new and the old unions grew at a phenomenal rate. In less than a decade, union membership skyrocketed from less than 3-million to over 12-million. Almost overnight, huge unions appeared to challenge management's right to make unilateral decisions in the country's biggest industries.

• **Shift in Sentiment**—Having achieved power, the unions proceeded to use it—and not always wisely. An impression grew up that unions were just as arrogant as business had ever been; that union leaders weren't appreciably more public-spirited than businessmen. Starting late in 1945, the nation was gripped by a 12-month strike wave of unprecedented scope and dimension. National sentiment on unions shifted discernibly. The Congressional election of November, 1946, seemed to show that a majority of the voters believed that unions had got too big for their boots. The Congress then elected proceeded to pass the Taft-Hartley Act. The pendulum had started its swing.

Taft-Hartley did not have the effects that some of its sponsors hoped and most of labor feared. It made organizing more difficult, it curbed some annoying, but marginal, union practices; but it did not really effect changes in unions or cut down the size of union leaders.

• **The Merger**—The election of a Republican President in 1952 after his opponent had been endorsed by both the AFL and CIO laid the groundwork for AFL-CIO merger. The unions anticipated a rougher time with employers who, they believed, would be encouraged to greater resistance by the political change. They anticipated a cooler attitude in Washington. Ending the 19-year rift seemed smart strategy.

Although the outcry against the merger was largely confined to business groups and trade associations, there were at least some politicians who sensed a public concern over what seemed to be a consolidation of union power.

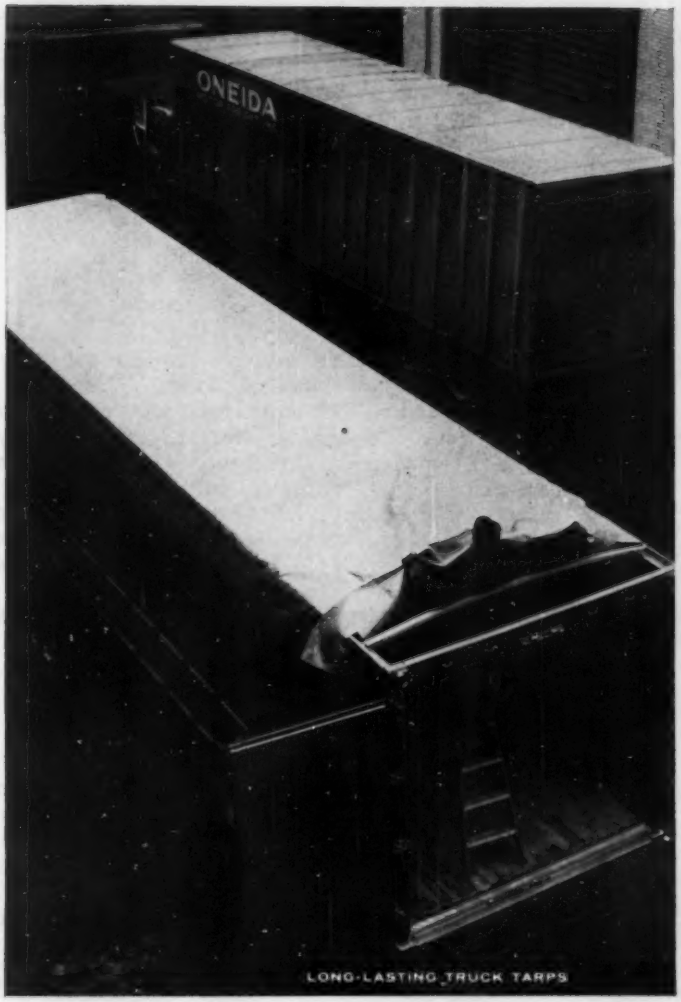
III. The Outlook

When the McClellan committee began to unroll the dirty canvas, it was playing to an audience that needed only a little evidence to confirm a suspicion it already had—that "something should be done" about the unions.

With its code of ethical practices and its sharp and immediate action against Beck, the AFL-CIO is trying to blunt the weapons being raised against the unions. But it seems already too late to forestall legislation that, no matter how carefully drawn, will make life more difficult for organized labor.

• **Repercussions on Employers**—Whatever new patterns are imposed on labor, employers will feel repercussions. Take one simple example: It has been widely suggested, and the suggestion has met with approval, that the power of national union officers, like Beck, be curbed and they not be allowed to exercise authority in the affairs of local unions. Many employers, finding a narrow, short-sighted, and unreasonable position being taken by a local bargaining committee, have appealed for the intervention of national officers who often have a better grasp of economic realities. These officers sometimes come in and brush the local people aside, insisting that they accept the economic facts of life. If Congress cuts down their authority, the local committee can tell the national officers to go fly a kite. More than one employer will shudder at that prospect. And more than one will tell you that it will make for more turbulent labor relations.

Hence, labor's crisis, promising internal upheavals within the unions, promises wider effects as well. The employer may take a moral satisfaction in what is happening, but it may well complicate his own affairs. Nevertheless, it now seems as certain as anything in politics can be that a sure-fire issue has been opened, and it will not be closed until there has been some brand new lawmaking.



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In Business

• • •

AEC Wants Funds for a Machine That Can Sustain Fusion Reactions

Research in nuclear fusion—the force behind the hydrogen bomb—has reached a second stage. This week Lewis L. Strauss, chairman of the Atomic Energy Commission, said he would ask Congress for money for a multi-million-dollar machine that—it is hoped—will produce sustained fusion reactions.

Called the "Model C Stellarator" (from "stellar" and "generator"), the device would be built at Princeton University. It would be a big brother of existing machines that have maintained the reactions only for "microseconds."

Strauss described the container for the reactions as a "magnetic bottle" in which a magnetic field will keep a plasma of heavy hydrogen, heated to a 100-million F range, from touching and vaporizing the container's walls.

One thing the Stellarator won't be: a pilot power plant. **It will be designed only to maintain a fusion reaction.** It may be many years, Strauss estimated, before any useful application of the reactor's heat will be possible.

• • •

The Central Has Latest in Piggyback; Trailer Slides Off Wheels to Flatcar

The New York Central came up with a new way to piggyback this week. Where some railroads roll trailers on flatcars, and others lift (BW—Feb.16'57,p114), the Central slides.

The new method called "Flexi-Van Service" features a special device for separating the rear wheel assembly from the trailer. The truck driver backs his trailer off its own wheels and onto a railroad flatcar containing a small turntable. When the trailer's center of gravity is over this turntable, a self locking hydraulic lift takes the weight off the tires. One man can then push the trailer around until it's parallel with the flatcar.

It is claimed Flexi-Van is faster, cheaper, requires less loading and tie-down equipment than other piggyback methods, and can be used by railroads with restricted clearances.

• • •

Dearborn Voters Say No to Buying Florida Haven for Their Oldsters

The voters of Dearborn, Mich., this week said an emphatic no to footing the bill for a Florida pasture for the old people of the Detroit suburb.

The plan—dear to the heart of Dearborn's Mayor Orville Hubbard—would have had Dearborn buy, build, and maintain a community of Dearborn, Fla. **There, retired people from Dearborn, Mich., could rent three-bedroom furnished houses for a modest $50 month. After one year, the renter could buy the house.**

Foes of the plan said it would give Hubbard too much power, and besides, most good Dearbornites prefer to do their retiring in Michigan. Fired by these arguments, the electorate turned down the plan by 14,000 to 8,500.

• • •

J&L's Moreell, Republic's White Hoot at Sagging Steel Operations

Two major steelmakers last week looked at the industry's sagging operations rate—and sneered.

Chmn. Ben Moreell of fourth-largest Jones & Laughlin said his outfit would show operations at 102% of capacity for the first quarter, and that chances were excellent for maintaining capacity on the second.

Chmn. Charles M. White of third-largest Republic said industry operations this year should be at least as good as in 1956—steel's No. 2 year. He said new records were possible in both production and shipments.

Through last week, steel's operating rate this year has eased from 98½% to 92½%.

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Business Briefs

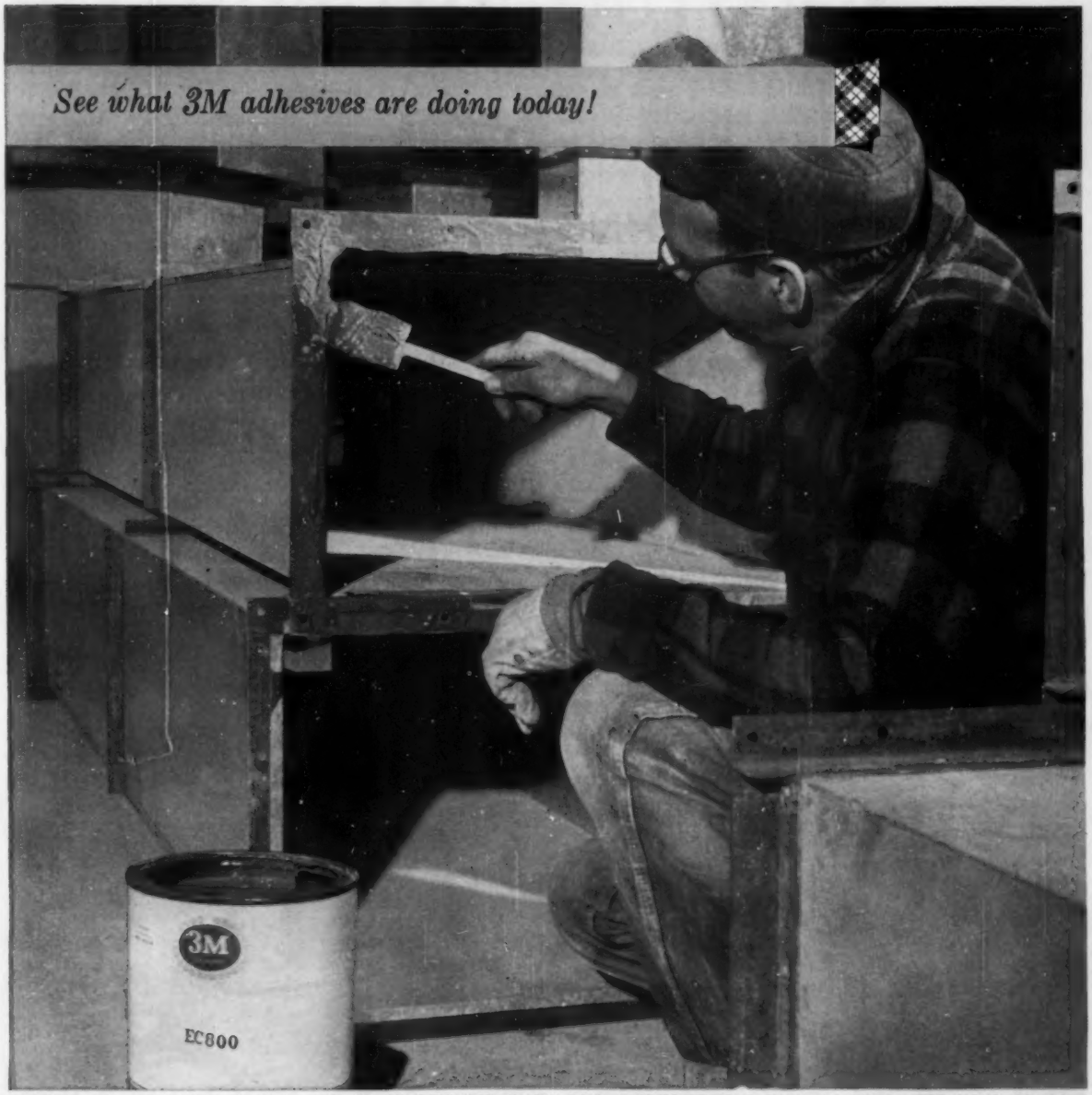
The 41,000-mi. $27.5-billion federal highway program **will take two or three years longer than expected** to complete Highway Administrator B. D. Tallamy told a Senate subcommittee this week. Tallamy said the program was "making good progress" but could not be completed by the target 1969 because grants to the states cannot be made faster than taxes bring in the money.

Pittsburgh Consolidation Coal Co. this week resumed testing of its 108-mi. coal pipeline—but without using coal. Oversize and improperly ground coal, due to failure of screening equipment at the Georgetown (Ohio) plant that prepares slurry for the pipe, caused the 400-ton stoppage, which lasted nearly five weeks (BW—Mar. 9'57,p24). Pitt Consol says the stoppage offers no evidence one way or the other whether the pipeline will be economically sound in commercial operation.

Installment credit of consumers **reached $31.2-billion at the end of February,** up $2.3-billion in a year, despite a $65-million drop in on-the-cuff buying during the month, the Federal Reserve Board reports.

Soft coal production this year will be around 516-million tons, rather than the 532-million tons, predicted earlier, says the National Coal Assn.

A Senate Judiciary subcommittee this week O.K.'d a bill that would **block the May 13 sale of General Aniline & Film** by the Justice Dept.'s Office of Alien Property. Subcommittee Chmn. Olin Johnston (D-S. C.) hopes to get a vote in the full Judiciary Committee next week. He is also backing a bill that would return properties, or the proceeds from their sale, to their original German or Japanese owners. It is believed that the bill would face stiff opposition if it reached the Senate floor.



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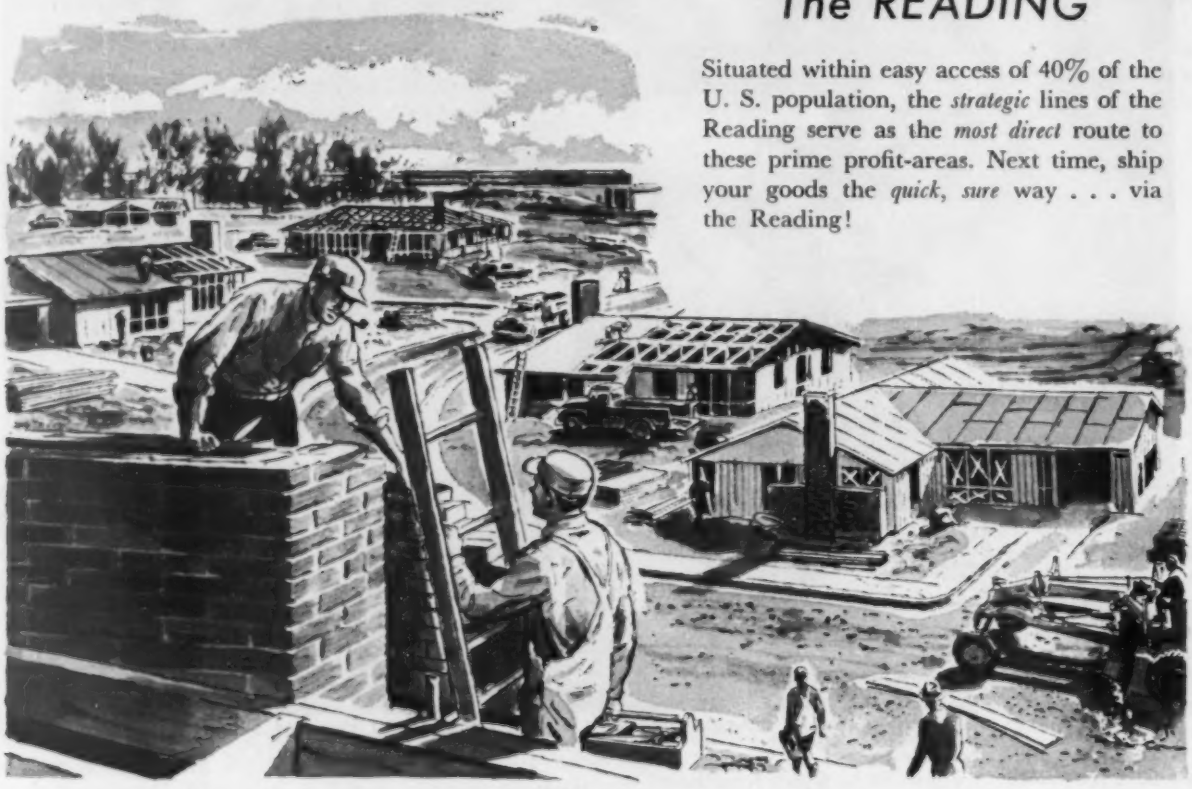
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WASHINGTON OUTLOOK

WASHINGTON
BUREAU
APR. 6, 1957



Foreign aid is in trouble in Congress—the Eisenhower plan to put $4.4-billion of cash on the line in the upcoming fiscal year and to make new commitments to extend this spending into the future.

Economy mail singles out this program for a cut. A sampling of the steady stream of letters from voters to their congressmen shows foreign aid mentioned more often than any other big-spending item. This is the one writers get specific about, where Congress should cut the budget to clear the way for later relief from current high individual income tax rates.

Aid won't be shut off. Congress recognizes it as too important in the cold war. Besides, even without any new action by Congress, the 1958 outlay would exceed $3-billion. But a cut in the requested new program seems likely, as Congress tries to boost the total of its cuts.

—•—

Other highlights of the mail, as shown by the sampling:

Writers think a $5-billion to $10-billion reduction can be made. But, with the exception of foreign aid, specific recommendations are scattered—they hit such things as farm price crops, defense, welfare programs, etc.

It's no campaign by the rich against big spending and taxing. Most of the letters are written by hand, many on ruled paper from school tablets. And many are from women. Most of the mail is from industrial areas, such as Milwaukee, Cleveland, and Pittsburgh, although just about every type of community is represented. Home addresses show a heavy flow from so-called working class neighborhoods—centers of union strength that in the past supported the big spending and soak-the-rich taxes of the New Deal.

That gives the protest a broad base and helps explain why many congressmen, with big-spending records, are climbing on the economy bandwagon—both Democrats and Republicans.

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What's back of it all?

You get many explanations from interviews with members of Congress and Eisenhower officials. A rather common line is that Treasury Secy. Humphrey frightened the public back in January when he warned that continued big spending, draining off capital needed by industry, might bring on a depression that will "curl your hair." Another theory is that the January inflation scare raised fears about living costs.

But the mail tags taxes as the No. 1 reason for the assault on spending. Steadily rising wages since the war have made millions of new taxpayers and have upgraded still other millions who, a few years ago, were nicked only a few dollars. They are demanding relief.

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A few statistics will help bring the picture into better focus.

Take steel workers as an example. In the past four years, their average hourly pay has climbed from $1.99 to $2.53. In terms of annual income, that is a rise from roughly $3,300 to $4,300.

The tax consequences are easy to see. A family of five paid no taxes in 1952 but now finds about $4 a week withheld from the paycheck. What's more important politically, once a worker's income passes the exemption level, the tax bite out of pay raises is obvious. The above example is oversimplified and rough. And it takes no account of the high number of

working wives whose income pushes family tax bills into much higher ground.

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You will see a political battle over tax relief, when it comes, probably next year just ahead of the Congressional elections. The Democrats already are committed on concentrating cuts in the lower income levels, either by higher personal exemptions or a lower starting tax rate. The Administration talks of a general percentage cut, with the idea that tax savings in the higher brackets would help supply capital to expand the economy and thus make jobs for the rising labor force.

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Congress is finding budget-cutting tough. Cuts so far have been relatively light and far short of what would be needed to shave a few billions off the spending that Eisenhower has scheduled for next year. In fact, some cuts being made now won't show up in spending until after 1958. That's because of the big open-end appropriations of the past, which have resulted in carryovers of large amounts of spendable funds.

Keep an eye on Sen. Byrd. He has a plan to tighten Congress' control over spending. He would place limitations on how much money approved for such long-term commitments as foreign aid and defense can be spent in any one year. The result would be to force the White House to get approval of its cash outlay each year. Immediate cuts in spending would be slight, but supporters of the plan claim it would give Congress a much bigger voice in future spending trends.

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Note how the Administration fight for the budget is building up, led by Eisenhower, himself. The President, after taking a slap last week at Congress' economy demands, this week called high spending and taxes a part of the price of peace. Most of his officials are stepping into the fight, too, opposing cuts for Health, Education and Welfare, Labor, Defense, and the Post Office Departments. Heads of these departments are pushing for their funds.

But the Treasury still calls for economy. Undersecretary Burgess told Congress that a $2-to-$3-billion cut should be made. He did this at about the same time Eisenhower was telling reporters he wasn't thinking in terms of any $2-billion cut in the current budget review. Burgess held out hope that a sizable budget cut now might clear the way for tax cuts next year. But he agreed with Sen. Byrd that the spending uptrend (page 46) and doubts about the business outlook hurt tax cut prospects.

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The Presidential disability issue won't be settled by Congress this year, and maybe not next. Democrats are cold to the proposal for an amendment to the Constitution spelling out how disability is to be determined before the Vice-President can take over. Some feel sincerely that there's no need for an amendment. But there's some politics in it, too. Opposition to Vice-Pres. Nixon is so strong on the Democratic side that some members are unwilling to do anything that might put him in control if illness should incapacitate Eisenhower.

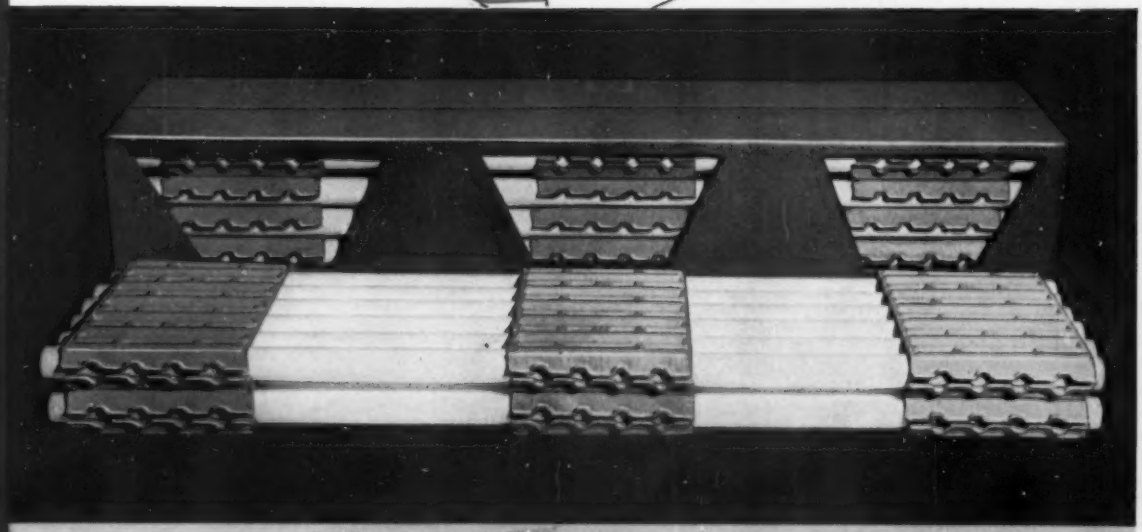
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The rumors that Eisenhower might resign have been floating around Washington ever since the elections. In fact, they started before last November—the line that Eisenhower would run, win, and then step out to allow the Vice-President to take over. This week, Eisenhower commented on them publicly—he called them "rot," an affront to his integrity.

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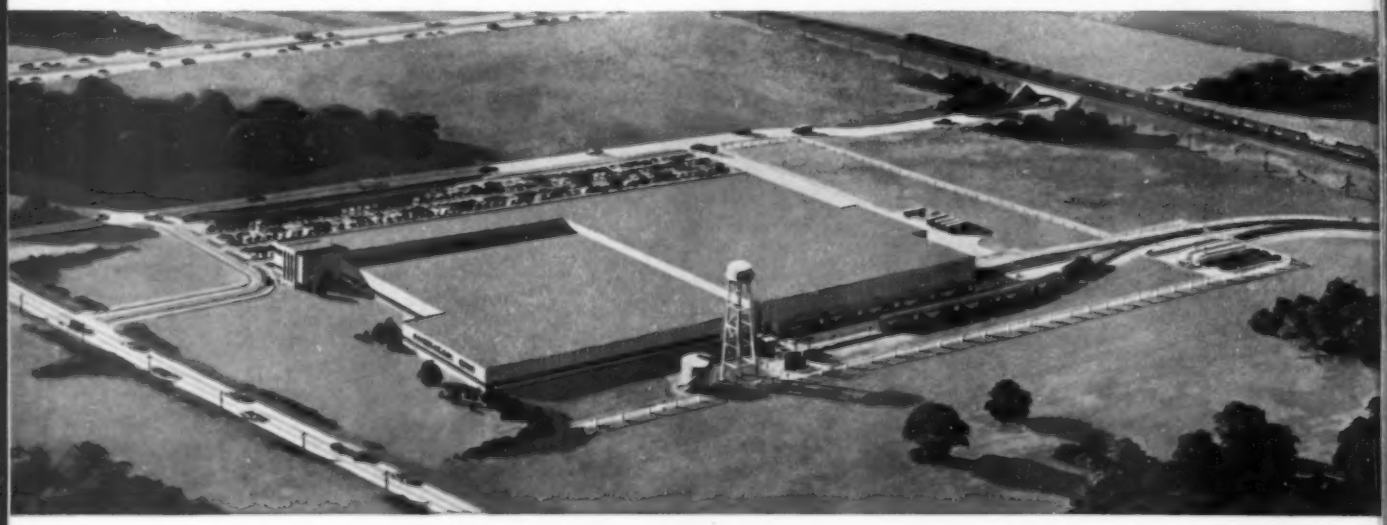
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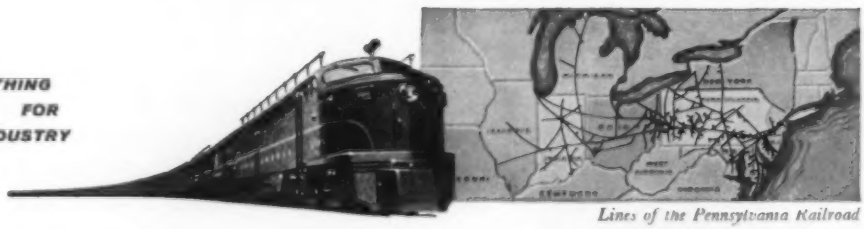
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$1571.16



PLYMOUTH SAVOY, V-8:
$1595.24



DODGE CORONET, V-8:
$1747.24



BUICK SPECIAL:
$1833.37



MERCURY MONTEREY:
$1836.92

How Detroit Figures Auto Prices

You probably couldn't buy any of the 1957 models pictured above for the price tags quoted. They're approximate wholesale rates, based by U. S. auto makers on an elaborate system that has scarcely changed in 30 years.

CHANCES are that no automobile dealer, busy as he is trying to attract the attention of the bashful spring buyer with the lure of falling prices (page 41), will quote a tag as low as those you see above. For those prices are just about what he pays the factory for the V-8 four-door sedans shown. He tries—but hardly ever succeeds—to get a price one-third more.

So those prices are the absolute floors, below which dealers will go only at peril of bankruptcy, even if the market situation turns a lot more desperate than it is now. And even in the search for a big spring market, the manufacturers most likely will not cut their own prices to the dealers to give the retailers any more trading room.

That is one of the characteristics of the automobile pricing system that sets it apart from other industries.

• **Confession**—Factories in the past have changed wholesale prices during the model year—Chrysler cut a few years ago—but it is an exceedingly rare thing, for such action generally connotes a miscalculation of such proportion as to endanger a company's future. The only other explanation for a factory price cut in midyear would be a gigantic change in the nation's economic status.

Factories do, in effect, cut their wholesale prices—but as a normal rule only toward the end of a model year and only after a magic barrier has been crossed. That barrier is something called the "standard volume." An understanding of those two words is an understanding of the automobile business and how its unique distribution setup functions.

Such an understanding, too, makes it clear that there is a rigidity about Detroit's pricing system making it imperative for auto companies to defend like grim death their factory list prices—up to a certain time of the year—and then engage in some wild fluctuations in the market place. In part, this rigidity stems from (1) the heavy investment costs of making autos and (2) the seasonal and cyclical swings in production schedules peculiar to the industry.

I. Standard Volume Concept

The concept by which factories set wholesale auto prices hasn't changed in more than 30 years.

The "base price" of automobiles at General Motors' factories, for instance, means the same thing today as it did when Donaldson Brown and Albert Bradley created the standard volume concept in the early 20s. Volume in this context has nothing to do with a sales manager's estimate of how many cars he will sell in a year. Volume to Detroit's pricing people is related to the capacity—ability to produce—of the manufacturer's plants.

• **Hypothetical Case**—Assume you are just entering the automobile business. The first step in determining standard volume is to plot the total auto market

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for some years back and some years ahead (there is no commonly accepted span of years). This gives you a curve representing the trend of market demand over the years. Then you determine what percentage of the market you should have and plot your own average market through the years to come.

Now you have to assume that at some point during those years the market peak demand will be above that curve. But by how much—10%, 15%, 25%? That is where you have to use judgment arbitrarily. Assume the peak demand is set at 25% above the average trend of demand. That means you build a plant with capacity for 125% of the production as it will average out over the years. Accordingly, your average production—again over a period of years—will be 80% of the plant's practical capacity. That 80% becomes your standard volume.

• **Starting Point**—Here's how it would work out: You want a plant that will give you a practical capacity of 1-million cars a year. Your standard volume then would be 80% of that, or 800,000 cars. This average figure of 800,000 cars a year becomes the basis of your pricing system. Your problem is to set prices so that you will cover all your direct costs, plus the cost of the plant if it operates at an average rate of 800,000 cars a year over the course of its usable life. Some years, of course, it will turn out more than 800,000 and some years less. But by pricing on the basis of 800,000 you insure that you will (1) make the return you want over the life of the plant and (2) have enough margin of extra capacity available to handle the peaks of the market as they occur.

• **Totting It Up**—You figure your costs exactly on the basis of producing 800,000 cars a year, including what you would have to pay for all materials and all direct labor, plus overhead, allowance for depreciation, amortization, and taxes. Assume your total bill for the 800,000 cars comes to $800-million. Each car actually costs $1,000.

You have to have a return on the money you used to establish the facilities to build the cars. GM's goal always has been a 20% return on investment.

At this point, you have a factory cost of $800-million. Then you have to figure out how much working capital you need and what your fixed investments are. This is the figure to which you apply the 20%. You then calculate your selling expense on 800,000 cars. Together all these things might add up to 25% of the factory cost.

Then your "base price" would become 125% of the factory cost—or $1,250—just as long as you don't change your profit goal.

• **A Gamble**—But this $1,250 is not necessarily the wholesale price of your car. You have to consider the competitive factors.

II. The Dilemma

The mythical $1,250 factory price is what you would like to get in order to yield your 20% return. But your competitor has a car that seems equivalent in value to yours. And he sets his price at $1,200.

In theory, of course, you could sell your cars for $50 more than your competitor. Both you and he are selling to a captive market—the dealers. Your dealers may think your price is too high—but, if they want cars at all, they have to pay it. In practice, though, your dealers would either die of financial malnutrition or switch their franchise—because their customers are not a captive market, and they would have to absorb the difference.

• **Avoiding a Giveway**—Your choice then is deceptively simple. At a price of $1,200 per car, you are giving away $40-million—$50 on every one of the 800,000 you need to make your standard volume. You have to figure on selling about 33,000 more cars to get it back, or find some way to squeeze $50 out of the cost of your car.

Competitive pressures in pricing can work in reverse. Last fall Ford announced its 1957 prices before Chevrolet did. Ford prices, on the average, were something less than 3% higher than in 1956. Chevrolet prices turned out to be about 6% higher. So Ford—in one of the few examples of a company changing a price already announced—revised its scale upward. "We found," says a Ford man, "that we were giving away $20-million to Chevrolet."

• **Counterbalances**—The one significant thing to remember about the standard volume concept of pricing is that as long as your capacity—say to make 800,000 cars a year—is unchanged, your costs change only with changes in the costs of materials and labor. Over a given period of years, your standard volume would never change. Accordingly, you could weather changes in the economy. In a poor auto year such as 1954, you may fall below your standard volume and, instead of getting a 20% return, get only 10%. In a boom year such as 1955, you may shoot far above standard volume in output. Your price base would be the same, and the two years would balance out in return on your investment.

This is what makes the automobile business about as risky as a weekend in Las Vegas. If sales exceed your standard volume, you make extra profit at a fabulous rate; if sales fall short of the standard volume, profits dip disproportionately. For example, if

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Industrial Roof Tiles



Constant product research paces Devoe's continuing leadership and growth. Facilities will be further expanded at Detroit product development laboratory.



Epoxy resin, used here as impervious transistor casing, is result of Devoe research. Pioneered by Devoe, epoxies are being utilized by an ever-widening front of industry.



The diversified line of Devoe paints and allied products protects and beautifies surfaces and structures of every kind—residential, industrial, commercial.

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CHEMICAL, PAINT AND METALLURGICAL DEPARTMENT
DEVOE & RAYNOLDS CO., INC.
TENNESSEE PRODUCTS & CHEMICAL CORP.

CONSTRUCTION DEPARTMENT
CONSTRUCTION OF EVERY TYPE

SHIPBUILDING DEPARTMENT
NEW YORK SHIPBUILDING CORP.

HIGHWAY TRAILER DIVISION
HIGHWAY TRAILER CO.

MILTON STEEL DIVISION
MILTON STEEL

YOUR CONFIDENCE IS JUSTIFIED WHERE THIS FLAG FLIES

MERRITT-CHAPMAN & SCOTT
CORPORATION
FOUNDED IN 1900
261 MADISON AVENUE · NEW YORK 16, N. Y.



amply proves Sentinel Service fills shippers' needs

Sentinel Service benefits are emphatically proved by *how much* the nation's shippers depend on them. Since the inauguration of this exclusive B&O service, millions of cars were protected by precise schedules placing them *where* wanted and *when*.

In instances where a Sentinel Car was interrupted in transit, shipper and receiver were notified and advised *again* of new scheduling.

Dependable performance has been the keynote of this service throughout the decade! Try B&O Sentinel Service—*Ask our man!*



BALTIMORE & OHIO RAILROAD

Constantly *doing things*—better!

you need to sell 800,000 cars to meet all expenses and get a fair return on investment, and you wind up selling 1-million, those extra 200,000 cars are all profit—except for the direct material and labor cost involved.

Look at it this way: Actual labor and material costs account for only about 75% of the sales dollar. On the standard volume alone, you net 8% of selling price; on all cars above the standard volume, you net 25%.

However, the reverse also is true. If you fall short of standard volume in sales, your profit slips at a fearful rate. Look at what happened to the Big Three in the past two years:

Percent change over previous years

	Chrysler		Ford		GM	
	1955	1956	1955	1956	1955	1956
Unit Sales	+79	−32	+31	−25	+32	−19
Dollar Sales	+67	−23	+38	−17	+27	−13
Profit	+440	−80	+92	−46	+48	−29

III. Time for a Change?

In a very good year, such as 1955, an auto company will sell its standard volume quickly—reportedly in that year General Motors had sold its standard volume by the end of July. After that, it customarily splits some of the extra return with its dealers.

Practices vary. To help dealers through the "clean-up" period (roughly August through October) before introduction of a succeeding year's models, some factories will run incentive contests among dealers, with a bonus for every car above a certain number. Other companies have a sliding scale of increase discounts, based on when the dealer orders from the factory. General Motors gives an extra 5% discount to dealers for all cars (and trucks) in their hands on the day the new models come out. For a Chevrolet dealer, as an example, this means a 29% discount, instead of 24%.

This isn't entirely altruistic. After the standard volume has been made, it is to the factory's best interests to keep production rolling until the last possible day before the plant must go down for model changeover.

• **Possible Modifications**—There is, however, a feeling among the very small group of Detroit experts in pricing theories that perhaps some modifications in the standard volume, either in concept or in application, are due. This involves two matters: cost of adding capacity, and market potential.

First, take the cost of new capacity. No auto company will say what its standard volume percentage actually is. But there are indications that although it hasn't been revised for a considerable number of years, it is now being moved upward. In other words, auto companies are recognizing the facts of modern production life. The traditional standard

BELL AIRCRAFT CORPORATION



Bell 47-J Four-Place Helicopter



Bell X-2, World's Fastest and Highest Flying Airplane.



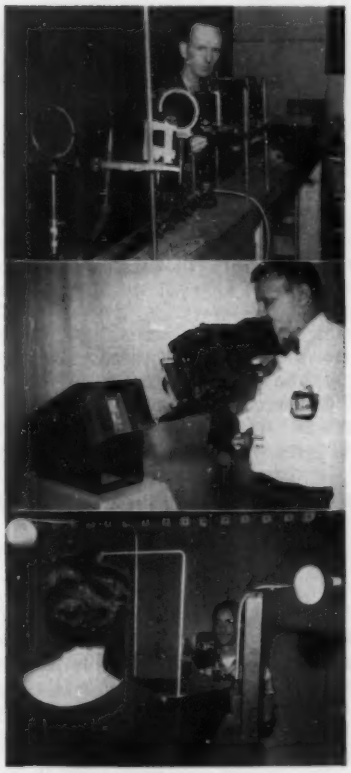
Bell Experimental VTOL, Jet-Powered, Vertical-Rising Airplane.

SERVED BY VARIETY OF GRAFLEX®-MADE CAMERA EQUIPMENT

Twenty years of pioneering in aeronautical design, development and production have established Bell Aircraft Corporation as an important leader in the aircraft industry. Like countless other industrial leaders, Bell has its own in-plant photo department, 100% Graphic and Graflex-equipped.

Fifteen photographers, twenty technicians and six clerks take care of Bell's photographic needs. Fifteen Pacemaker Graphics—all equipped with Graflite flash units—are used for general views, plane-to-plane photos, test set-ups, public and employee relations pictures. A Graphic View camera is employed for photos of small objects, portraits, copies and shots requiring correction of linear perspective. A Graflex Identification unit takes care of personnel identification.

Graflex-made cameras were chosen at Bell because they are rugged, easy to operate, have low maintenance cost, are rapidly serviced and give completely satisfactory results. The production of photos, copies and reproductions has once again been tremendously speeded up through the establishment of an internal photo department.



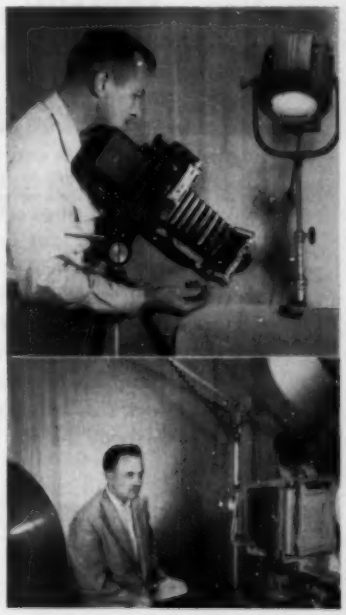
BELL USES A PACEMAKER GRAPHIC aligned on an optical bench for recording propane flame studies in the laboratory.

THE EXTRA LONG BELLOWS of the Pacemaker Graphic permits actual size photos of small parts to be taken.

HERE, BELL TAKES ADVANTAGE of the dividing back, which allows two pictures to be taken on one film, to make duplicate transparencies.

BELL USES THE GRAPHIC VIEW camera's wide range of adjustments to make studio portraits for publication and public relations use.

A GRAFLEX IDENTIFICATION UNIT, set up in the Bell Personnel Department, permits employee photos to be taken expertly and rapidly.

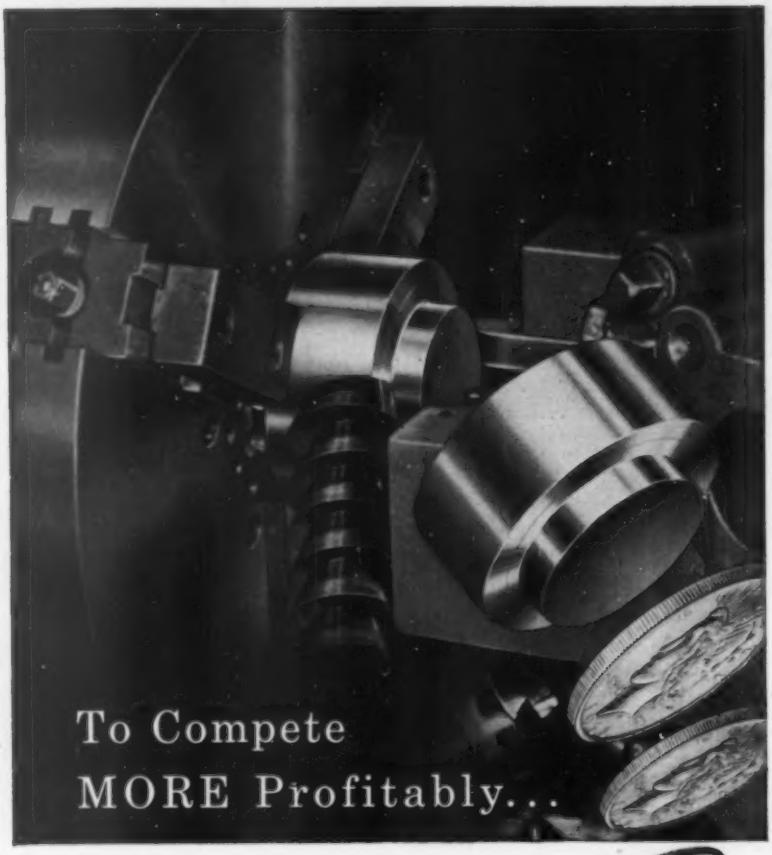


If you use photos in your business, you can save money on a Graflex-equipped in-plant photo department. For free booklet showing how Graflex-made cameras serve industry, write on your letterhead to Dept. BW-6, Graflex, Inc., Rochester 8, N.Y.

GRAFLEX® *Prize-Winning Cameras and Equipment*

70th Anniversary—1887-1957

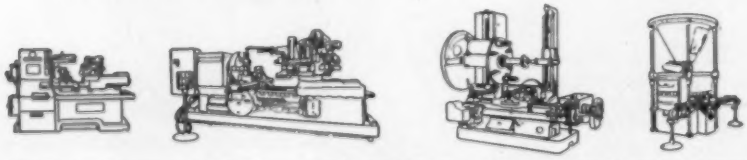
A SUBSIDIARY OF GPE



You MUST cut costs

Designed and built to hog out tough metals faster and to hold required tolerances while increasing output rates, Potter & Johnston Automatic Turret Lathes are your best bet for cutting production costs and gaining an effective advantage over competition.

You can't reduce wage scales, material costs, power rates or taxes . . . but you *can* investigate Potter & Johnston Automatics now. Teamed with time-saving P&J-Engineered Tooling, these machines have everything it takes to increase production, improve work quality, shorten machining time, and reduce costs by providing divided labor charges. Write today for complete information . . . there's a P&J Automatic for every work size requirement. Potter & Johnston Company, Pawtucket, Rhode Island.



AUTOMATIC TURRET LATHES . . . GEAR CUTTERS . . . GILDA PACKAGING MACHINES

P&J **POTTER & JOHNSTON**
SUBSIDIARY OF PRATT & WHITNEY COMPANY, INC.
PRECISION PRODUCTION TOOLING SINCE 1898

volumes (as a percentage of capacity) were established when labor was relatively more important in total cost than capital investment. Thus, it made sense to keep your overtime labor costs down by spreading your capital costs over a lower percentage of capacity—the standard volume—than is feasible today. Up to now, a company found itself able to afford excess capacity of, say, 20% over the standard volume as a means of protecting its market position in all the seasonal and cyclical fluctuations. It could pay for that 20% of sometimes idle capacity by figuring the cost of it as part of the standard volume price.

• **Competitive Woes**—Now, though, with plant and equipment costing so much more, you have to add so much more to the standard volume base price to buy that 20% protection that it throws your prices out of line with (1) a competitor who may have older capacity and (2) the general price picture of the whole economy.

So what you do is refigure your standard volume by changing the percentage—from 80%, say, to 85%.

This is risky, if you are determined to maintain your market share regardless of how auto demand swings in a season or over the years. It means that you are betting that such swings won't actually be so wide as the industry, using an 80% standard volume, has assumed. Both Ford and Chrysler in 1955 form good examples of what can happen. They were in a bind because they actually did not have enough capacity to take full advantage of a swing.

You have to remember that market position is important—it can affect acceptability of your car to the public and hence influence used car prices that give dealers room for trading.

• **More Buyers**—But it may be that auto companies will have to live with that risk for still another reason. Total market potential is slowly creeping up for new cars—more slowly by a great deal, apparently, than Detroit had expected (page 41)—but still it is moving upward. So new capacity is a must, again to maintain your share of the larger market. But with costs so high, it is difficult to get back your normal 20% return on investment. In figuring out your base price, older equipment still gives you 20% on the investment of 20 years ago. But on facilities built in 1957-58 extra efficiency isn't enough to make up the difference.

Thus some auto companies find themselves in a strategic squeeze. They have to raise their standard volume percentage in order to spread costs over more units (1) because of price competition with a more favorably situated competitor and (2) because the increasing market requires added capacity, which is out of line in cost under the old standard volumes. **END**



New boiler at Mando burns coal the modern way for economical steam generation

Consult an engineering firm

Designing and building hundreds of heating and power installations a year, qualified engineering firms can bring you the latest knowledge of fuel costs and equipment. If you are planning the construction of new heating or power facilities—or the remodeling of an existing installation—one of these concerns will work closely with your own engineering department to effect substantial savings not only in efficiency but in fuel economy over the years.

facts you should know about coal

In most industrial areas, bituminous coal is the lowest-cost fuel available • Up-to-date coal burning equipment can give you 10% to 40% more steam per dollar • Automatic coal and ash handling systems can cut your labor cost to a minimum. Coal is the safest fuel to store and use • No smoke or dust problems when coal is burned with modern equipment • Between America's vast coal reserves and mechanized coal production methods, you can count on coal being plentiful and its price remaining stable.

Mando—the Minnesota and Ontario Paper Co.—is keeping pace with continuing production expansion. The firm recently installed in its plant at International Falls, Minn., one of the largest modern single-pass boilers in the pulp and paper industry. It is designed to produce 240,000 lbs. of steam an hour, bringing the mill's steam generating capacity to 960,000 lbs./hr. The new boiler has 22,500 sq. ft. of heating surface and required 300,000 lbs. of steel in its construction. It will use 775,000 gallons of water a day and, for economy, will burn pulverized coal as a primary fuel—300 tons daily!

For further information or additional case histories showing how other plants have saved money burning coal, write to the address below.

BITUMINOUS COAL INSTITUTE
Southern Building • Washington 5, D. C.



KEY in enlarged Du Mont radio-TV setup will be Richard Buckley, WNEW head.

When Radio Comes To Help Pep Up TV

Du Mont purchase of thriving New York radio station WNEW aims to bolster up its own lagging TV operations.

NEW YORK radio station WNEW scoffs at the talk circulating nowadays about radio's "revival" (BW—Feb.9'57,p131) from a TV-induced slump. It thinks the situation is the other way round—and as evidence points to Du Mont Broadcasting Corp.'s purchase of WNEW itself (BW—Mar. 30'57,p54).

Not only did WNEW bring a record $7.5-million—the highest price ever paid for a radio station, and the third highest for any broadcasting station, including TV. The purchase also has behind it a plan to add the radio station's resounding financial and programing success to a lagging TV operation to build an expanded, strengthened broadcasting company.

A key man in the new plan is WNEW president and general manager Richard D. Buckley (picture). Buckley, who came to WNEW from the presidency of John Blair & Co., held a 25% interest in the station. He is taking his share of the purchase price entirely in Du Mont stock, and becomes a vice-president and director, as well as second largest stockholder, in the enlarged Du Mont company. The largest stockholder, Paramount Pictures Corp., is represented by one of its vice-presidents, Bernard Goodwin, as president of Du Mont.

• **Rebuilding**—Du Mont Broadcasting Corp. was formed from a spin-off of the unprofitable TV broadcasting end of Allen B. Du Mont Laboratories, Inc., in 1955. The network reportedly lost $16-million in its 10-year life.

Currently, Du Mont Broadcasting is operating two TV stations—WABD in New York and WTTG in Washington. It has been struggling with a lot of inherited problems, many of them resulting from the fact that in the spin-off Du Mont ended its few remaining network operations, leaving the stations to find new programs and advertisers.

Bennett Korn, vice-president and general manager of WABD, says it is now successfully building its program structure and attracting advertising support. According to Goodwin, WABD is in the black this season, and the Washington station should be shortly.

• **New Strength**—The financial strength the radio station will bring is, of course, an important gain for the new operation. Aside from this, Buckley says the chief benefit WNEW will contribute is skilled personnel.

Since he's not yet part of Du Mont (the sale awaits Federal Communications Commission and Du Mont stockholder approval), Buckley declines to go into specifics on his plans. But at Du Mont, Korn says his company is already under the influence of WNEW ideas. For one thing, both he and Ted Cott, Du Mont vice-president and general manager, are WNEW alumni.

Korn adds that there's already a similar approach to programing and selling. WABD, for example, works on the "counterpoint" programing idea—that is, putting entirely different types of entertainment against competitors' shows to lure viewers who don't like what the other stations offer.

• **Record**—WNEW's influence should be healthy. The station is generally acknowledged as the leading radio independent, and can offer some pretty convincing facts to justify this reputation.

Station revenues are seldom revealed, but WNEW has opened its books a trifle for a peek at its financial condition. Its 1947-48 gross income of $2,540,709 (fiscal year beginning in October) had risen by 1953-54 to $3,627,957. In the 12 months from February, 1956, to February, 1957, gross revenue was $5,157,969.

From the $5-million gross, WNEW took more than $2-million, or almost 40%, as income before taxes and depreciation. The station won't reveal net income, but on a recent application to FCC for license renewal, it reported earned surplus of $352,870 for the 12 months ended Jan. 31 this year.

• **Audience**—Before a station can sell advertisers, it has to build an audience. How well WNEW has done this is indicated by a 10-year comparison of ratings. In March, 1947, its rating (the percentage of total radio homes listening to WNEW) in the 6 a.m.-10 a.m. period was 1.4. Last month it was 4.2. Weak afternoon segments of 10 years ago have gained 2 rating points or so.

That helps its competitive position in a tough market that includes the flagship stations of three nets as well as other independents. WNEW claims that the three rating services it uses all give it the highest average audience in



MARYLAND COUNTRYSIDE

Flying the colors of a bright new season

New signs of success are in the air, and foremost in aviation is the exciting new Fairchild F-27.

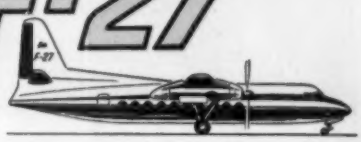
Airline passengers will like the new propjetliner: the comfort of the air-conditioned, pressurized cabin, the smooth, hushed cruise.

Airline operators, too, welcome this new addition to their fleets. They see a fast 280 mph aircraft, costing less to buy, fly and maintain.

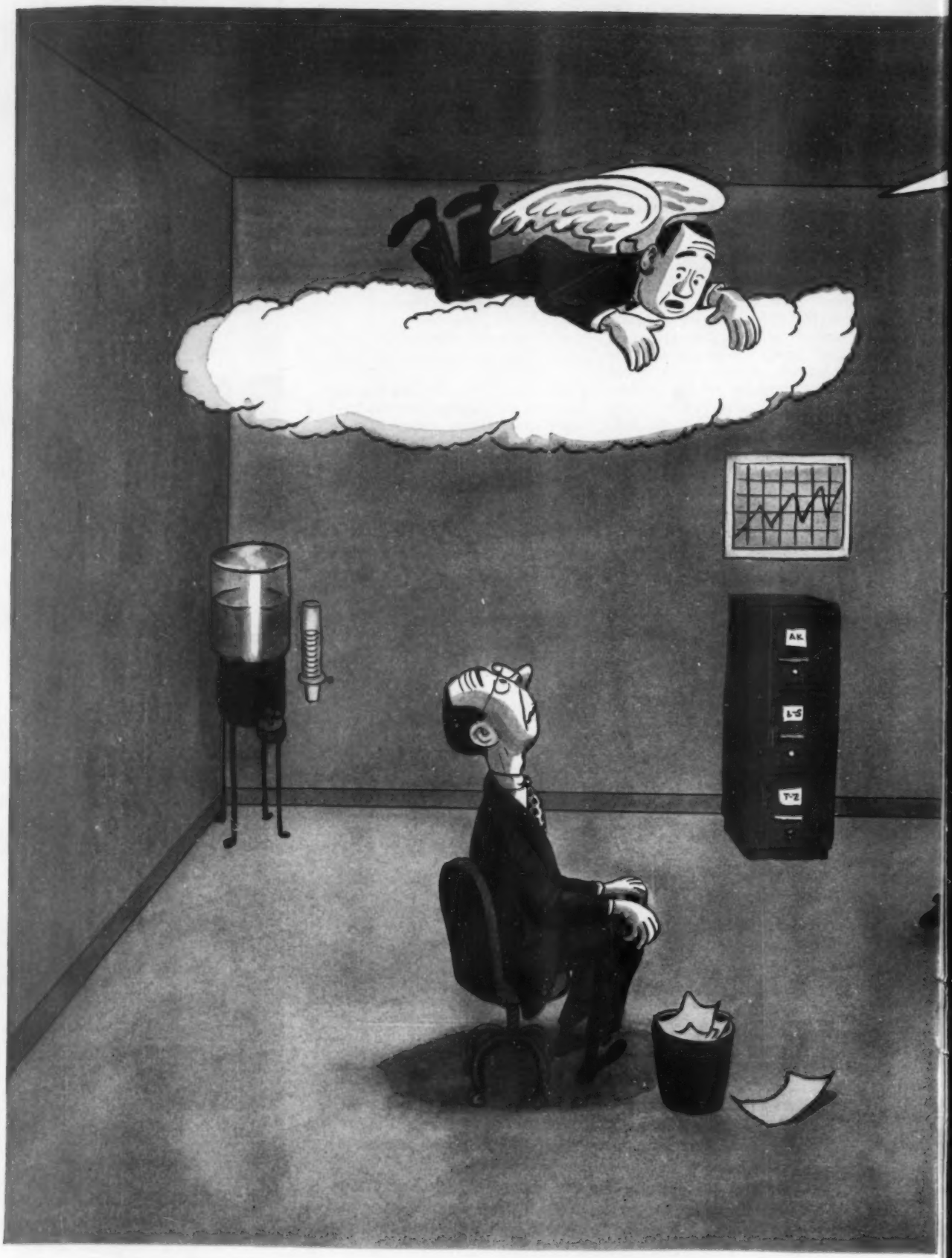
Address inquiries to: R. James Pfeiffer, Executive Director of Customer Relations, Fairchild Engine & Airplane Corporation, Hagerstown 15, Md.

FAIRCHILD

F-27



THE FINEST AIRCRAFT FOR AIRLINES, CORPORATIONS AND MILITARY SERVICES


A-K
L-S
T-Z

"But nobody dies on purpose, Cal!"



Cal: It couldn't be worse if you'd planned it that way.

Dan: But I left my business to the family. What happened?

Cal: Estate taxes, Dan. Inheritance taxes.

Dan: I don't understand. What about my credit?

Cal: A-1, Dan. But—ahem—*you're* gone.

Dan: Oh. You mean, the bank wouldn't —?

Cal: No, they wouldn't. I had to sell the business.

Dan: Oh.

Cal: I told you to consult your attorney. Your banker, too.

Dan: I remember. Business insurance.

Cal: Business insurance by Equitable.

Dan: I know, I know.

Cal: Just as important as planning production quotas.

Dan: Enough, Cal. You'll do your best?

Cal: You know I will, Dan. But my best will be a salvage operation.

Dan: If I had it to do over—



X-4

Living Insurance for Business by Equitable

FREE BOOKLET

Equitable Life Assurance Society of the U. S.
393 Seventh Avenue, New York 1, New York—Room 1807
Please send me Equitable's new booklet which explains how *Living* Insurance can help solve many common business and tax problems.

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on request:

this informative book

to help you select

the right paper

for each of your

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Parsons
PAPER

... makers of permanent prestige business papers



WRITE ON YOUR BUSINESS LETTERHEAD FOR BOOKLET 1F4: PARSONS PAPER CO., HOLYOKE, MASS. © PPCO 1956

New York City. From February, 1954, to December, 1956 (a period roughly corresponding with Buckley's tenure), WNEW's average share of audience (that is, the number of homes actually listening to radio that are tuned to WNEW) rose from 14.1 to 22.7. The same study showed all network affiliates had lost in share of audience, while other independents gained considerably less than WNEW.

• **Program Magnet**—What is the program magic that captures such audiences? It sounds simple: The basic recipe is popular music, recorded and live, around the clock, with five-minute newscasts every hour on the half-hour (prepared by the New York Daily News). Into that simple formula goes a staggering amount of work, planning, showmanship, highly paid knowhow.

The music-news format was especially cultivated, since big network shows held sway during the evening. WNEW was the first to make big use of disk jockeys, to broadcast music around the clock, with 24-hour news broadcasts. Now, says program manager John Grogan, WNEW's methods are imitated by stations all over the U. S.

For its prodigious outpouring of music, WNEW draws on its mammoth record library of some 130,000 disks—largest of any U. S. station. Most records are freely given by grateful record companies, but WNEW pays fees to the copyright agencies—the American Society of Composers, Authors, and Publishers (ASCAP), and Broadcast Music, Inc. (BMI). The station is one of the few with its own orchestra. Its well-paid disk jockeys are masters of popular music, audience tastes, and both the hard and soft sell.

• **Format**—A rundown of the broadcast day shows how the music—and commercials—are blended into a pattern that fits the listener's probable activities and his (or more likely her) mood at the time. The 6 a.m.-10 a.m. segment, which brings greater revenue than any other, adds frequent time and weather announcements to the music. From 10 a.m. to 11:30 a.m. Art Ford conducts the morning segment of his Make Believe Ballroom (WNEW says it's New York's most highly rated radio program today). Then come Bing Crosby and Friends (on records); a program featuring the orchestra; Musical Hall; in late afternoon Make Believe Ballroom, and so on into the night and early morning.

This format has given WNEW a high place among radio stations. As the trend carries other stations along to similar programing (Buckley says even the nets are approaching WNEW's techniques), can the station retain its unique character and success? Buckley is sure he can keep ahead of any imitators. "Success," he says, "lies in the degree of difference." END

ANOTHER New
HARTWELL
DEVELOPMENT

Large Trigger-Action FLUSH LATCH...



for gloved hand operation

The new large trigger line was designed for specific, heavy duty latching applications. The large operating trigger provides easy opening and closing even when operator is wearing heavy gloves. These rugged flush latches are made of stainless steel or coated cold rolled steel in various offset combinations for different door and frame thicknesses.

Another example of HARTWELL teamwork in the development of products to meet customer requirements.



Complete specifications available upon request.

WHAT ARE YOUR REQUIREMENTS?
Better take them to
"Flush Latch Development Headquarters!"

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9035 VENICE BLVD., LOS ANGELES 34, CALIF.
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Hackensack, New Jersey • Wichita, Kansas
Fort Worth, Texas • Seattle, Washington

In Marketing

• • •

Radio-TV Commercials Monitor Pounces On Three Patent Medicine Advertisers

The first false advertising complaints developed by the Federal Trade Commission's new radio-TV unit were filed this week. Targets are three national distributors of arthritis and rheumatism medicines. Set up last October to supervise FTC's expanded program of monitoring commercials, **the radio-TV unit is aiming primarily at the false or misleading visual demonstration of products (BW—Mar.9'57,p154).**

Two of the companies—Mentholatum Co., Inc., maker of Mentholatum Rub, and Whitehall Pharmacal Co., maker of Infra-rub and Heet, are charged with using deceptive visual demonstrations on network TV, claiming that their products afford hours of relief and have great penetrating powers. FTC denies these claims.

Omega Chemical Co., distributor of Omega Oil, and the other firms are accused of making similar false claims in radio, newspaper, and magazine ads.

• • •

Canada Maps New Plan For Its Radio and TV Networks

Canada's Royal Commission on Broadcasting has made public its blueprint for the course of Canadian radio and television in the years ahead—if the government approves. Canadian broadcasting operates under a dual system of both private and government-operated stations.

Mostly, the report heartily endorses Canadian Broadcasting Corp., the government body that controls broadcasting. CBC has the say in granting broadcasting licenses, setting up networks, establishing the type of program that may be carried.

But the commission suggests some changes to strengthen both CBC and Canadian broadcasting generally. The report expresses concern that, without such strengthening, Canadian stations may become mere branch outlets for U. S. networks.

It would limit foreign ownership of a station to 20%.

It would provide that CBC's main financial support would come from the federal Treasury's general revenues. The present 15% excise tax on receivers, plus advertising revenues, aren't enough to keep CBC out of hot water.

The commission would set up a new supervisory system for both CBC and private stations. A 15-member Board of Governors would take over the work of the present CBC Board of Governors. The new board would regulate the stations, appoint key officers of CBC, which would become a crown corporation, rather like the TVA in the U. S.

The commission would drop the "single station" policy that has allowed only CBC stations to operate in the six major markets, though in one of the six, Ottawa, CBC would still have the field to itself. Similarly, CBC stations would be permitted in areas till now reserved for private stations.

Despite this important concession, the Canadian Assn. of Radio & Television Broadcasters, representing some 170 private radio stations and 30 private TV stations, is likely to fight the recommendations. The commission had some harsh words about the caliber of some of the private programs. More important, CARTB had wanted a private body, along the lines of the U. S. Federal Reserve Board, to regulate both CBC and private stations. The Progressive Conservative Party, backing CARTB, may make this an election issue. The question will not come up in the present session of Parliament.

• • •

Stouffer Moves Into Campus And MIT Gets a New Menu

Stouffer Corp., restaurant chain of Cleveland, is diversifying again. Not so long ago (BW—Mar.10'56,p74) it started selling frozen food in a big way through retail stores. Now it is in the institutional catering business.

Since February, 1957, Stouffer's subsidiary, Management Food Service, Inc., of Philadelphia, has been catering for Walker Memorial Hall's cafeteria and snack lounge at Massachusetts Institute of Technology. **This week, it added a second MIT hall, Baker House—after student riots protesting the quality and cost of Baker House meals had caused a campus furore.**

Stouffer really started this service back in February, 1953, when it began catering for the 1,000-plus employees of First Pennsylvania Bank & Trust Co. of Philadelphia on a test basis. A year ago, Management Food Service was formed to handle this end of the business.

The institution pays MFS a straight fee for the service, keeps any profits realized in the dining hall. The only personnel MFS employs are managers and dieticians; the institution employs cooks, waitresses, and the like. MFS is in charge of ordering, purchasing, and preparation of all foods, from the 4,000 recipes owned by Stouffer Corp.

• • •

Antitrusters Charge Loew's With "Block-Booking" of TV Films

The Justice Dept.'s antitrusters last week borrowed a page from its famous motion picture case of years back (BW—May8'48,p21) to file suit against Loew's, Inc., for alleged "block-booking" of motion pictures. Only this time it is the TV stations, not motion picture theaters, that are involved.

The government says Loew's requires TV stations to license its pictures in groups—including many the stations do not want—in order to get any pictures. The government would like the courts to require Loew's to offer its products to the stations on a picture-by-picture basis.

Loew's is the producer of pictures that carry the Metro-Goldwyn-Mayer label. Joseph R. Vogel, Loew's president, denies that his company has forced unwanted pictures on the stations.



1946 Wm. U. Hudson, Vice-President, Gerber Baby Foods, Oakland, California **1956**

Because raw materials and rich markets are nearby...

INDUSTRIES "GROW PLACES" IN MOA

(Metropolitan Oakland Area)

Close, convenient supply of basic raw materials – a location central to serve all the rich western markets – these were major reasons for Gerber's original selection of MOA for a branch plant location. Was the choice wise? In the past 10 years, Gerber production has increased approximately 300%!

Mr. Hudson reports, "Abundant availability of fresh produce, combined with a high calibre of labor, has helped us maintain relatively uniform production in an industry plagued with starts and stops. MOA's central location and excellent transportation facilities simplify distribution throughout the incredibly fast-growing 11 Western States, Hawaii and Alaska."

Gerber's experience is no isolated example. Since 1945, branch plants of 28 national firms have expanded their MOA operations 97 times. Total additional investment, $59 million. Shouldn't you be sharing this growth? MOA (entire Alameda County) offers a location central to all western markets (24 million population) where shipments reach the West's most distant point in 3 days...where mild year-round climate helps keep production high, costs low...where water and power, raw materials and skilled workers are all abundantly available.

WRITE FOR FREE FACTFILE

Your inquiry will be held confidential, and you will receive complete, concise Data Sheets providing a complete "pre-plant" survey of climate, markets, living conditions, transportation networks, sources of supply and plant location map of 200 nationally-known firms.

"On the Mainland Side of San Francisco Bay"

Metropolitan
Oakland
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ALAMEDA
ALBANY
BERKELEY
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HAYWARD
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NEWARK
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INDUSTRIES

Atomic Exporters Take a Partner

● **U.S. manufacturers are teaming up with foreign companies in their quest for international markets for atomic power equipment.**

● **The chief reason is that there will not be too many sales of American-built plants in countries that have the know-how and skilled workers to build their own.**

● **By joining up with an overseas company, the combine can count on a substantial share of foreign sales.**

U.S. companies in the atomic equipment business are finding it profitable to join forces with foreign companies in the quest for export markets. Such combines make sense particularly in Europe and Japan, which want to build their own equipment and which probably never will be customers for more than one or two reactors. The theory is: Why not combine, swap patents and experience, and sell some components.

The idea seems to be catching on: Just a few weeks ago, word leaked out that AMF Atomics, Inc.—a division of American Machine & Foundry Co.—and Britain's Mitchell Engineering Ltd. had sold an atomic plant to a West German power company.

This was the first sale by such a team, but several other U.S. companies have formed partnerships for this purpose with foreign companies. Experts predict that these and still-to-be-formed combinations of U.S. and overseas companies will account for a substantial share of international sales of atomic equipment.

• **Joint Deal**—The AMF-Mitchell combination came into being just about a year ago. Their agreement calls for joint construction of atomic power plants in the British Commonwealth and other countries. Spokesmen for both companies said they felt there was an immediate need for atomic power plants in many countries.

AMF still is saying little about the West German order. This is probably because no start can be made on actual construction until the U.S. and West Germany have completed a bilateral agreement authorizing an exchange of nuclear equipment and information.

It has been learned, however, that AMF and Mitchell, in cooperation with a German manufacturer of conventional power equipment, plan to have a 15,000-kw. power plant in operation in Germany by late 1959. Heart of this plant will be a boiling water reactor designed by AMF. Buyer will be the Rhenish-Westphalian Electric Works, Germany's largest electric utility company.

• **Behind the Deal**—AMF is no neophyte in the foreign atomic trade. It already had contracts for small, nonpower reactors for Canada, West Germany, Japan, and the Netherlands (BW—Jan.26'57,p169). It worked out the deals for these research machines without benefit of its Mitchell partner.

What brought about the AMF-Mitchell partnership probably was a combination of factors—the shortage of dollars in most foreign countries, the worldwide shortage of technical manpower required to build and operate atomic plants, the lower cost of foreign construction.

But an underlying motive with many companies in the nuclear equipment field is the conviction that there simply will not be many sales of atomic plants to be built in the U.S. and put down complete in Europe or Japan. Such countries have the manufacturing facilities and the skilled manpower to set up their own atomic equipment industry eventually. So they are likely to buy only a few complete reactors, or major components of reactors, before they are ready to build this equipment themselves.

So, most U.S. equipment makers figure, they can only expect to be completely frozen out of European and Japanese business if they now adopt a policy of selling complete reactors or nothing. In addition, in the foreseeable future, they will have to compete with European and Japanese suppliers who may be able to undercut the U.S. prices because of the differential in labor costs.

• **Solution**—To a number of companies, the best answer to this long-range dilemma is a partnership with one or more foreign firms. This approach is not so appealing to such giants of both the atomic and conventional power equipment business as General Electric Co. and Westinghouse Electric Corp. Such companies have subsidiary companies, licensees, and affiliated distributors of their equipment abroad. Without doubt, they will rely on these long-standing contacts to represent them in the atomic equipment field.

It is companies like AMF, ALCO Products, Inc., and North American Aviation, Inc., that have shown the greatest interests in foreign partnerships. These are companies with little background in the conventional power equipment field, but with considerable experience in the U.S. atomic development program.

• **Pending Partnership**—North American Aviation has been dickering with ASEA, the big Swedish electric equipment manufacturer, for nearly a year. North American spokesmen say they have not yet decided on company policy in regard to foreign partnerships. The agreement with ASEA has not been completed, but it's not dead yet, either, company spokesmen say.

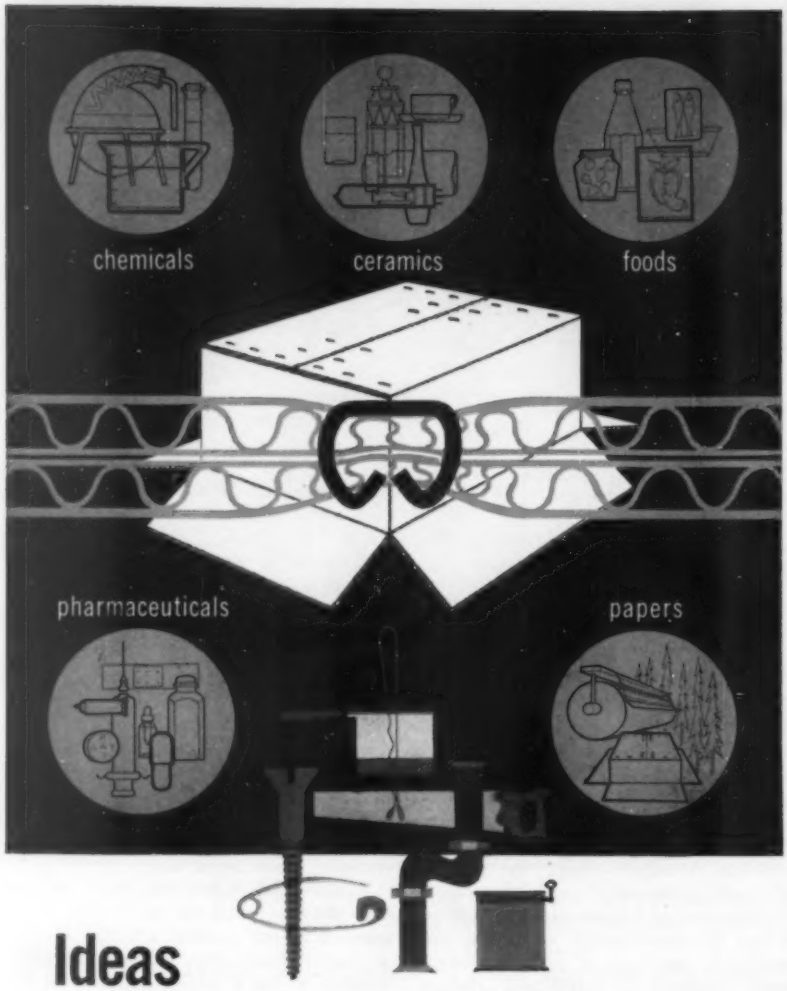
Meanwhile, North American on its own has concluded one of the few U.S. sales of power reactors abroad. It has an order from American & Foreign Power Co. for a 10,000-kw. reactor to be installed in Latin America.

• **Contract Signed**—ALCO Products, which soon will complete the so-called "package power reactor" for the U.S. Army, has signed a marketing agreement with Humphreys & Glasgow, Ltd., British engineer-constructors. This agreement covers sales of ALCO nuclear equipment everywhere except on the North American continent.

Humphreys & Glasgow has extensive connections outside the British Isles—a branch office in Australia, a subsidiary in Canada, associate companies in France, West Germany, India, Japan, and South America.

ALCO has in mind foreign sales of a plant based on the design of the low-power (under 2,000-kw.) package power plant. The company has designed a 10,000-kw. version of this pressurized-water reactor. It believes that such a plant built today in England would produce power at only slightly higher costs than that of electricity from conventional sources.

"Such a plant," explains a company spokesman, "would have considerable promise of producing power even more



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economically as nuclear fuel costs were reduced and fuel elements were improved. And since it would have to be refueled only every year or two, it would avoid the present problems of many countries of high coal, oil, and transportation costs."

• **Dollar Factor**—Reportedly, the principal motive behind the ALCO-Humphreys & Glasgow agreements was the shortage of dollars in Britain and other countries. Daniel Adamson & Son, previously licensed to build ALCO heat exchangers and other thermal equipment, is likely to help with actual construction of atomic plants. ALCO will largely supply designs and knowhow. ALCO and Humphreys & Glasgow would train personnel to operate the plants.

• **Other Advantages**—A representative of another company considering a foreign partnership sees additional gains:

"Prospective customers in countries of Asia and Africa with little technical manpower want the manufacturer of their atomic plant to supply personnel to run it for the first year or so," he says. "U.S. reactor operators are scarce and most of them don't want to spend a year abroad. But European technical people are more willing to go to another country. So your foreign partner can solve this personnel problem for you."

• **Drawbacks, Too**—The same source also revealed some of the headaches of getting involved in a foreign partnership. In the first place, most foreign companies seeking such partnerships are over-eager to get started. They are impatient with U.S. law which requires their government to negotiate a bilateral agreement before there is any exchange of information or equipment.

"They want to look at U.S. reactors, then start building them," says this man.

Another drawback is the demand by most foreign companies for exclusive markets for the products of their U.S. partner. This presents a problem as to how far the U.S. partner should go. Should it go so far as to freeze out another foreign affiliate who marketed your company's widgets for years before you got into the atomic business? Or should you give the widget distributor a crack at your atomic gear?

• **Possibilities**—It is much easier to market a non-power, or research, reactor abroad. The U.S. already has concluded limited bilateral agreements with 40 nations, permitting export of research reactors to those countries. Again, the red tape is considerably less. A U.S. exporter needs only report to the Atomic Energy Commission within 30 days when he ships atomic equipment to one of the 40 countries. No AEC license is necessary.

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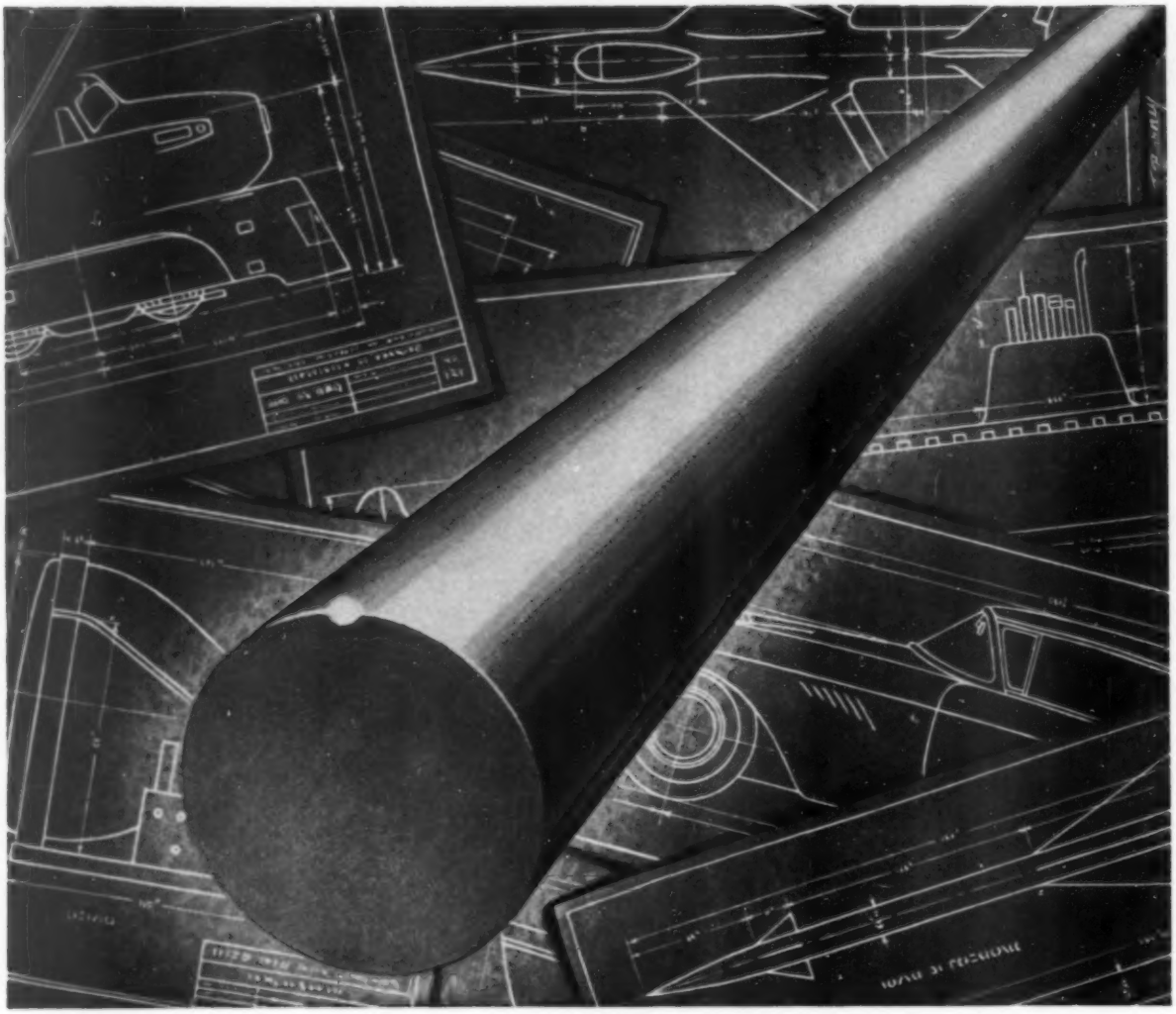
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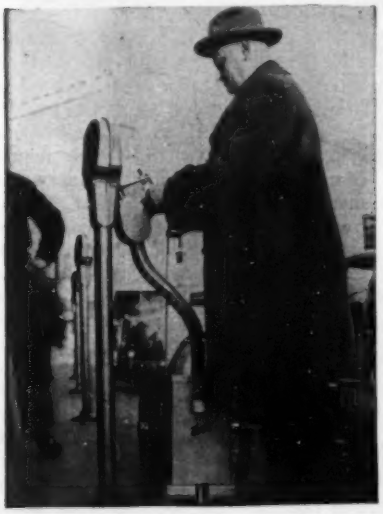
mitting export of power reactors with only four nations—Canada, Belgium, the United Kingdom, and Switzerland. Negotiations of additional pacts are about completed with the Netherlands and Australia. Several others, such as the one with West Germany, are in the works.

• **More Strings**—Under the power bilaterals, a U.S. company must obtain specific AEC authorization for the export of nuclear fuels, reactors and secret information. It must do this in connection with every project it plans to build abroad.

In addition, for either power or nonpower projects, U.S. companies have to obtain AEC or Commerce Dept. licenses for export of certain materials. For example, Commerce requires an export license for graphite, no matter what its end use may be.

• **Untouchable**—In some respects, foreign trade in atomic gear is a sacred cow around Washington these days. No one really wants to interfere with it. AEC, Commerce, and the antitrusters all are keeping an eye on this trade. But no one is coming up with any objections—so far.

This does not mean the export business will always enjoy sailing clear of federal interference. AEC is required by law to report to the Justice Dept. on activities in the atomic field that might violate antitrust regulations. And there are several members of Congress who say they are watching all atomic agreements with an eye for any cartel overtones.



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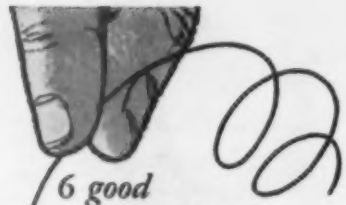
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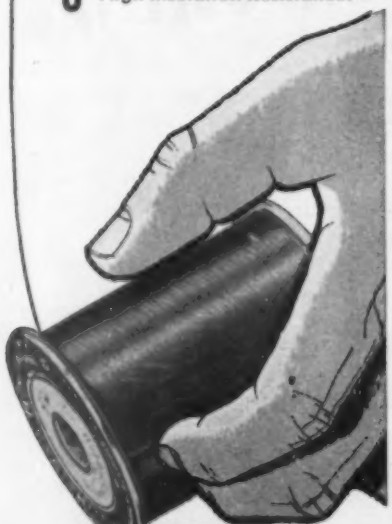
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Hot Dispute Over Frozen Food

ICC and regulated truckers are battling courts and unregulated lines over whether frozen foods are unprocessed farm products. At stake: 1-million tons of freight.

In a regulated world, substantial chunks of business can hang on the answers to some pretty legalistic sounding questions. For instance: "Is a package of frozen peas a farm product or a manufactured item?" At stake is an estimated 1-million tons of freight a year from the rapidly growing frozen foods industry.

• **ICC's Stand**—The Interstate Commerce Commission, which regulates interstate truckers transporting virtually all goods except farm products, insists frozen foods are processed sufficiently to be classified as manufactured goods. As such, ICC claims the right to regulate truckers hauling them.

But the courts have been overruling ICC on this issue. They have held that if a product retains a "continuing substantial identity," it also retains its exempt status. In effect, they say, a pea is still a pea whether it is frozen or on the vine.

So, ICC now is turning to Congress for help.

• **Truckers' Position**—The outcome of this legalistic squabble is all-important to the truckers. Both regulated and non-regulated transporters currently are moving frozen foods. But the regulated lines are afraid of being priced right out of the field. That's because they must comply with numerous government regulations, are restricted in where they can go, and must charge more or less approved freight rates. So they line up behind ICC in the dispute.

The unregulated truckers, on the other hand, are required only to meet certain safety standards. They can go where they please, charge what they like. There's nothing to prevent them from bidding low on a job just to pick up a return load. This group of truckers precipitated the current legal battle by appealing adverse ICC rulings to the courts. And, so far, the courts have backed their contention that frozen foods are unprocessed agricultural commodities. Even frozen strawberries that are sliced and sugared before freezing have been granted exemption.

• **What Next?**—What worries both regulated truckers and the ICC is the possibility that the court's thinking on frozen foods might someday be extended to include canned foods. After all, has a canned pea lost any more of its identity than a frozen pea?

ICC is not waiting for someone to pop this question in court. It is asking Congress to limit the exempt status of farm products to those that are moved from the point of production to the primary market. This would prevent unregulated truckers from hauling foods from freezing plants to consumer markets. Similarly, it would rule out a change in the regulated status of canned foods.

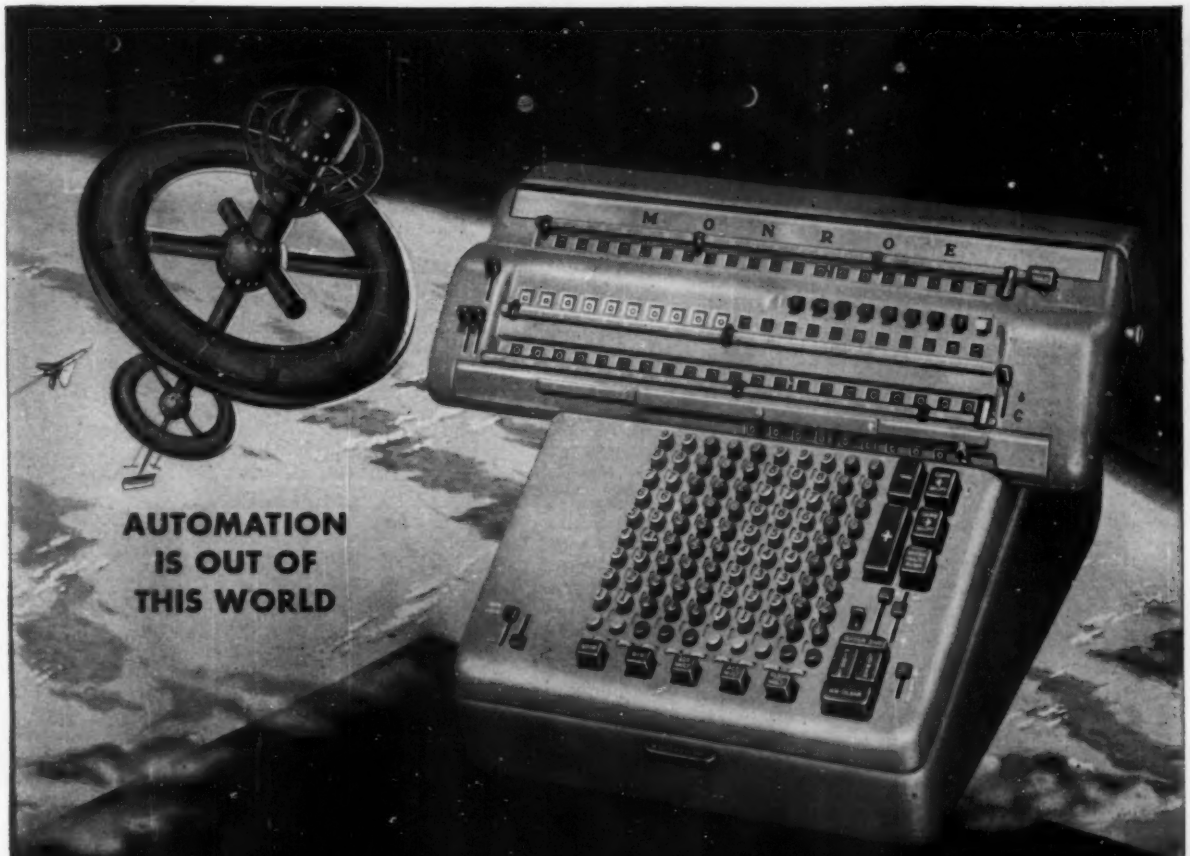
• **Original Intent**—ICC is reminding Congress of the circumstances surrounding the passage of the law that gave the commission the right to regulate motor truck rates. The exemption granted farm products was written into the law as a concession to farmers who balked at the idea of having to go to ICC to get authority to haul their crops to processing plants or to have rates for such hauls approved by ICC.

But the farmers, says ICC, are not reaping any benefits as a result of unregulated truckers hauling frozen foods at cheaper rates from processing plants to distribution centers. The man who is making the gain, the commission contends, is the middle man.

• **More Competition**—Besides the loss of present freight, the regulated truckers have another reason for wanting a quick settlement of the whole dispute. They don't want any more competitors—regulated or unregulated. Traditionally, when new regulatory laws are enacted, truckers that are already in business are given authority under "grandfather rights" to continue operations, subject to whatever new regulations are put into effect. This would mean an unregulated trucker hauling frozen food could hold onto his business even though he would have to submit to regulation. Normally, it is tough for a new trucking concern to get ICC authority to operate in an area that is already serviced by a trucking line. This is required to haul any commodity except farm products. So, the longer it takes to decide the issue, the bigger toehold the unregulated lines will get.

In addition, the regulated truckers hesitate to invest in expensive refrigeration equipment if the courts are likely to rule their freight out from under them.

• **Fair Game**—The unregulated truckers feel frozen food tonnage is fair game. These concerns—spearheaded by Frozen Food Express, Dallas, and Home Transfer & Storage Co., Mt. Vernon, Wash.—are sure to put up a scrap if Congress tries to change the law. **END**



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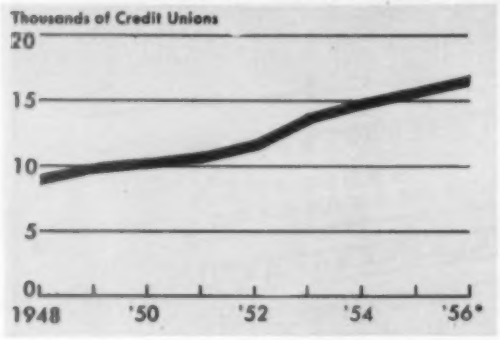
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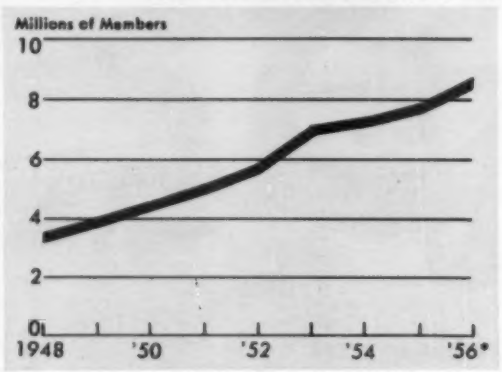
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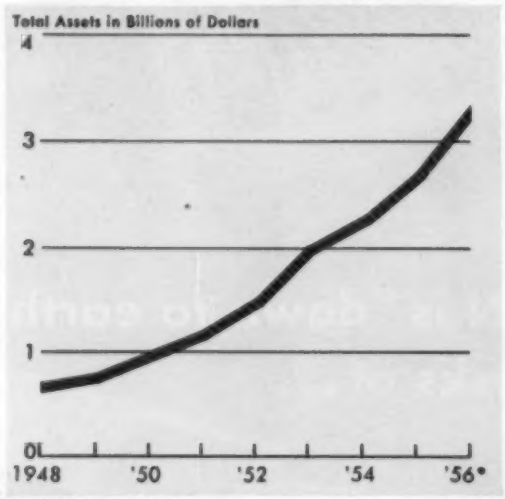
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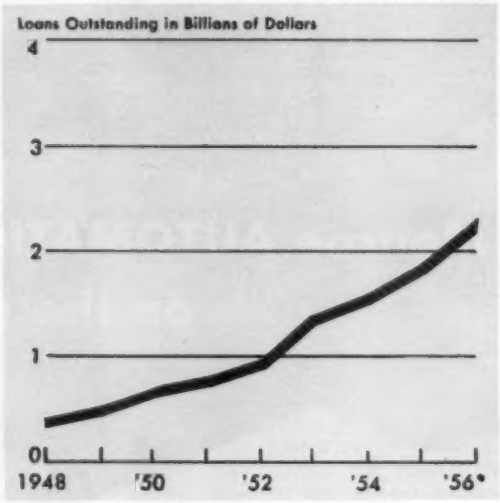
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*BUSINESS WEEK Estimate

Data: Credit Union National Association; Bureau of Federal Credit Unions.

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Other Lenders See a New Rival

They didn't mind it when the credit unions were small and were confined to business they didn't want anyway.

Now the credit unions hold 17% of all personal loans, and some of their special advantages are coming under fire.

SOMETIMES it doesn't pay to flourish too conspicuously, the nation's credit unions are finding out. As the charts show, the credit unions are growing fast—probably faster, percentagewise, than any other financial institution in the country—and they are attracting critical attention from competitors, such as banks and personal finance companies, that used to ignore them.

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unions are neither small nor struggling—at least as a group.

Membership in a credit union is restricted to those who share a common bond—social, occupation, religious, or neighborhood. Around 80% of the credit unions are formed by employee groups, either in single plants or in trade unions. The average credit union has about 525 members or shareholders (minimum investment is one $5 share), and its average loan is around $450.

Credit requirements are less stringent than those of other lending agencies, and interest rates are generally lower, partly because overhead is negligible. In the past three years, outstanding installment credit of these unions rose 80%, compared with a rise of 39% for consumer finance companies and 37% for personal loans by banks.

At the end of last year, credit unions held about 17% of all personal loans outstanding in the U.S. They had 8.8-million members, around $3.3-billion in assets, about $2.3-billion of outstanding loans.

I. How Much Competition?

Some credit union loans are too small for other lending agencies to handle profitably; some would be refused under stricter measurement of credit risks. Their relatively low interest rate—not more than 1% a month on unpaid balance—may attract loans that might not otherwise be made.

Nevertheless, some financial people contend that a large part of credit union loan business is directly competitive with other lending agencies.

• **Few Big Ones**—There are 16,847 credit unions in the U.S. Many are tiny, but they range up in size to the giant Municipal Credit Union for city employees in New York: 43,514 shareholders, 30-odd employees, $12.4-million in assets, $10.5-million in loans.

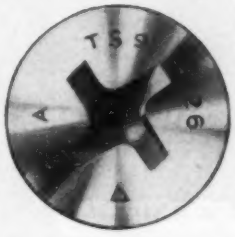
At an American Bankers Assn. credit conference in Chicago last month, Dr. Rudolf Modley, a management consultant who specializes in credit union operations, said: "A rough estimate indicates that there are about 1,000 credit unions today which have a volume of loans and a size of loans that would permit profitable operation by commercial lenders. These 1,000 credit unions have about half the loan volume of all 17,000 credit unions."

• **More Businesslike**—Modley commented, too, that the evangelist spirit seems to be going out of the credit union movement, that its younger leaders think in terms of promotion and of getting the maximum mileage out of its competitive advantages.

"It is becoming more and more difficult," said Modley, "for many credit union workers to maintain the belief that they render a unique kind of serv-

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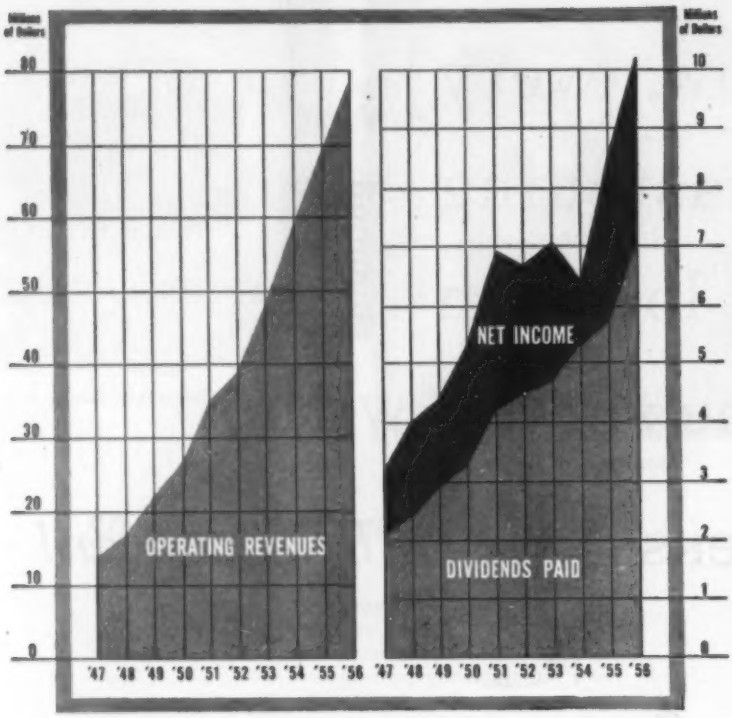
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Southern Natural Gas Company

Our Record for the past ten years



Our Record for 1956

In its Annual Report, Southern Natural Gas advises stockholders that it

- ★ Acquired a majority interest in The Offshore Company, drillers of oil and gas wells specializing in submerged lands off the Gulf Coast
- ★ Made contracts for purchase of gas from fifteen additional gas fields
- ★ Drilled 19 development wells productive of oil or gas
- ★ Increased gas deliveries about 12% over 1955
- ★ Increased the regular dividend payments to an annual rate of $2.00 per share

The Results:

Gross revenues and net income again higher than in any previous calendar year.

	1956	1955
Total Volume of Gas Sold—Mcf	308,307,297	274,851,165
Average Daily Sale—Mcf	842,370	753,017
Gross Revenues	$80,798,930	$69,919,556
Net Income	$10,285,355	$ 8,534,139
Net Income per share	$2.35 (on 4,375,785 shares)	$2.37 (on 3,596,699 shares)
Dividends Paid per share	$1.85	$1.65

SOUTHERN NATURAL GAS COMPANY

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ice, that they serve mankind, or that they are doing anything else but work for one of several types of credit agencies."

The American Banker, daily trade paper, editorialized last spring along the same line: "The idea that seems so innocuous when evidenced in small, purely localized units takes on a vastly different character when it appears as major-sized competition with chartered bank services."

II. Filling a Need

In their early years, everyone seems to agree, credit unions filled a need with a service that no one but the loansharks duplicated.

Around the turn of the century, workers were flocking to the rapidly industrializing cities. They came with little money and few household goods. To tide them over the transition to factory employment or through family emergencies, these workers had to rely chiefly on local charity, pawnbrokers, or loansharks—bank credit was hard to get for newcomers in tight financial circumstances.

These people had few pawnable belongings; local charities could help only in the most desperate cases, so the loansharks grew fat.

• **Beginnings**—In 1909, the first credit union in the country was formed in Manchester, N. H., and patterned after similar groups that were already established in Europe and India. In the same year, Edward A. Filene, Boston merchant and philanthropist, persuaded the Massachusetts legislature to authorize credit unions.

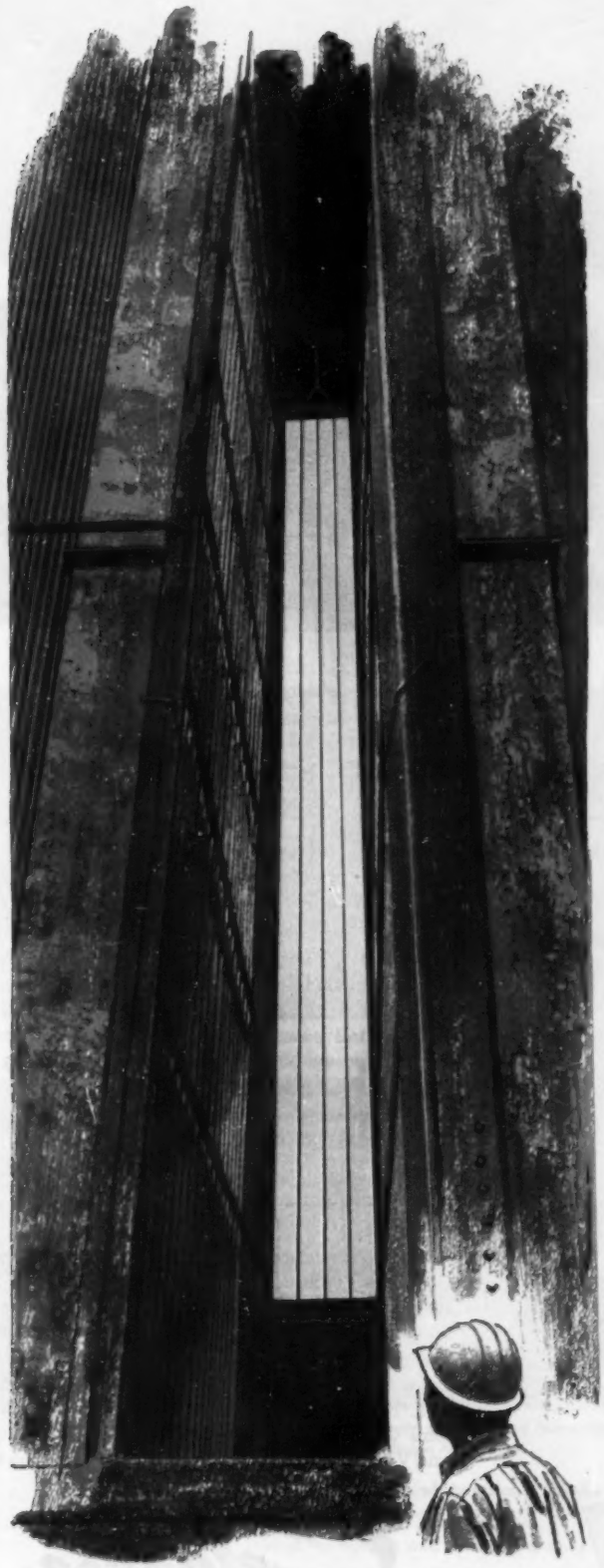
By 1935, most states permitted credit unions, Congress had passed a similar act, and there were 3,700 credit unions with 750,000 members. Everybody seemed in those days to favor the credit union as a device to provide workers with small loans at low rates.

Today, critics say, there are plenty of sources for small loans; laws against usury and the growing strength of the legitimate personal finance companies have just about done away with the loanshark blight. The credit unions now compete for the savings dollar and the loan business, say the critics, so why should they continue to be subsidized by government and business?

III. How They Are Run

Credit unions are chartered as nonprofit institutions by federal and state governments. By law, they can do business only with members, whose purchase of shares provides the common pool for lending. Profits at the end of each year are distributed among the shareholders as dividends.

Although they were originally set up



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doesn't even own a brush!

PROBLEM: fast, economical, prime coating of 28-foot-long steel roof and deck panels.

SOLUTION: 2 years' joint effort—the world's largest flow-coat unit—and Glidden NuPon primer.

Inland Steel Products, Milwaukee, manufactures steel roof decking for industrial and commercial buildings. These panels were once finished by dip application, an unsatisfactory operation because of size limitation, low production rate and high materials costs.

Today, Inland produces five hundred fifty 28-foot panels per hour. As they pass whirling jets, each panel is completely and uniformly coated with Glidden NuPon* primer. This new operation has reduced rejects, offers a 50 percent saving in finishing costs.

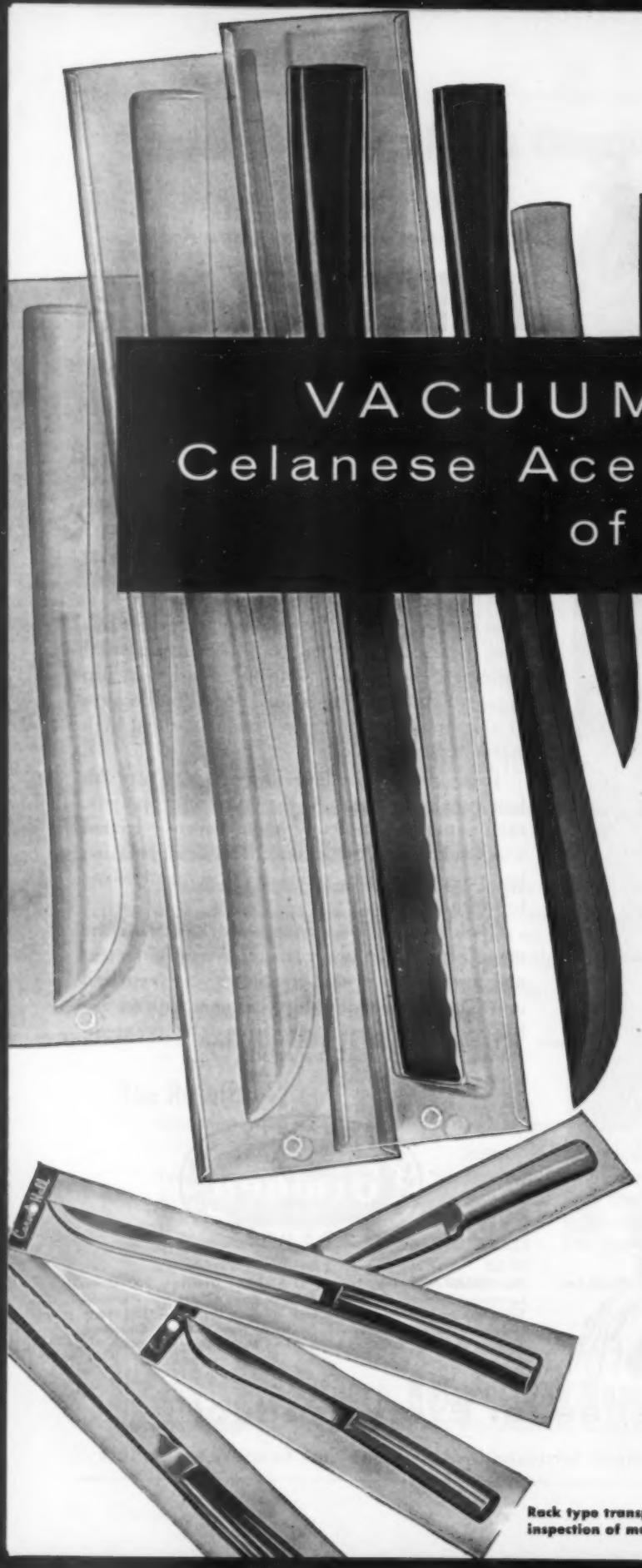
Glidden finish-engineers worked with the manufacturer for two years in the development and installation of this completely conveyorized unit. The same relationship continues with on-the-line assistance in every step from delivery, application, through final inspection.

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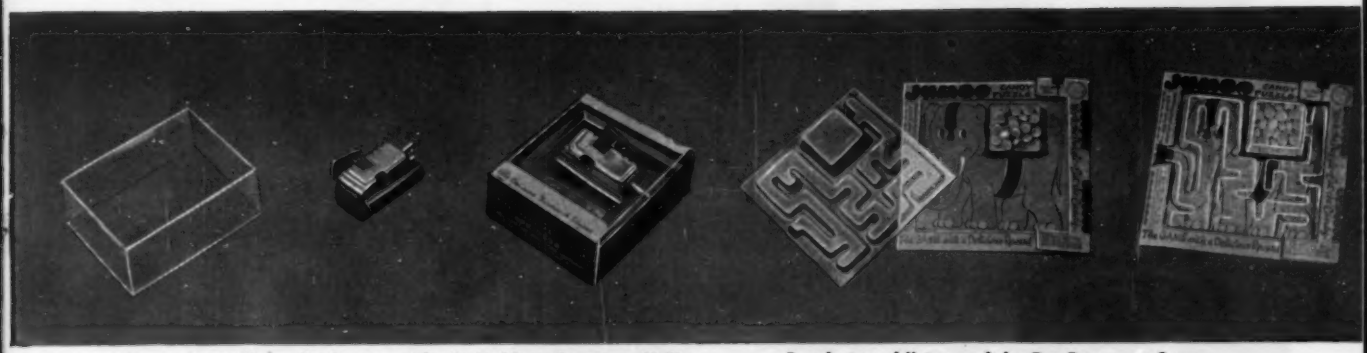
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Transparent candy box for Charm Candy Co., Bloomfield, N. J.

Blister Pack by Vakipak, New Haven, Conn., for Car Mac Key Chain.

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Transparent Sleeve by Syracuse Plastic Molders, Syracuse, N. Y., for General Electric Hi-Fi Cartridge.

Puzzle-type blister pack by Par Beverage Corp., Cincinnati 10, Ohio, for Candy Maze.



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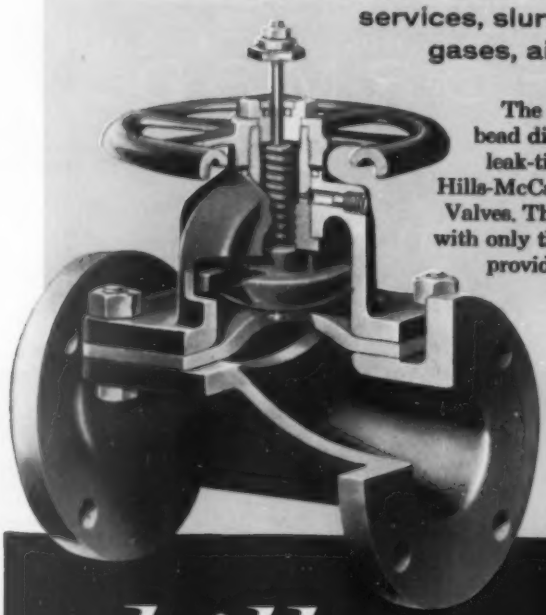
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to make small personal loans to members, credit unions now make loans for purchase of autos and appliances, even make mortgage loans. They are restricted by law in how they invest their money. Generally, they can invest it in loans to members, in shares of savings and loan associations, in government or municipal bonds, in utility bonds and in loans to other credit unions.

• **Amateur Standing**—Although they are run by amateurs, the credit unions have a surprisingly good record of performance, despite a few well-publicized defalcations. About half the credit unions are chartered by the federal government, the other half by the separate states. Up to 1950, fewer than 2,000 federally chartered unions had closed shop.

Prof. John T. Croteau of Notre Dame University found that one-third of these credit unions folded up because they couldn't get anybody to run them; 20% because the membership was too small to support them; 25% because of industrial shutdowns, layoffs, labor trouble; 10% because of management hostility. These liquidated credit unions averaged about 18 months of life; about 79% paid their shareholders in full.

• **Typical Case**—Even in recent years, management and labor have often joined in establishing new credit unions.

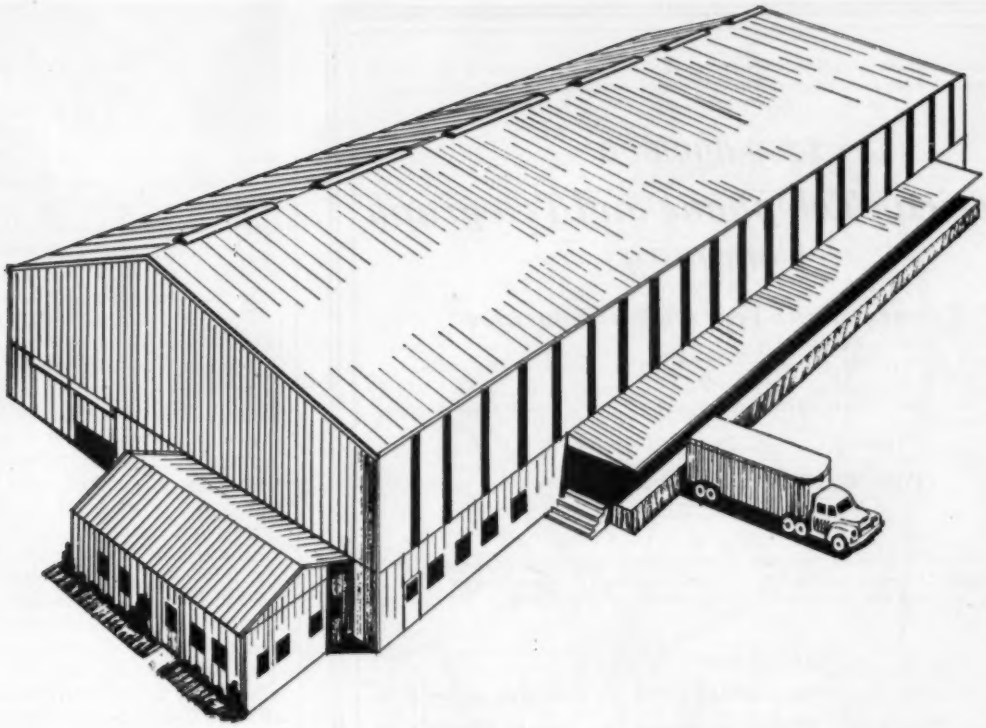
Three years ago, for example, a big newspaper was being plagued by attachments of employees' salaries, by scores of requests each week for salary advances, and by complaints about loansharking, particularly among the deliverers and the composing room help. Management and employees, with the help of a field man from the state credit union association, organized a credit union.

Today, the credit union has more than 2,000 members, nearly $700,000 in assets, about $600,000 in outstanding loans. Garnishees have been sharply reduced in number, says management; so have requests for advances. And, with the credit union to refer to, it's much easier for the company to turn down requests for advances.

The company lets employees administer the credit union on working time, gives them free office space, helps supervise the books and payroll deductions. All this costs money—perhaps more than the nuisances of garnishments and salary advances—and the company recognizes the remote possibility of anti-management feeling if the credit union should fail. But losses haven't been far from the national experience—only about one-fifth of 1% of all loans.

On balance, company management regards the credit union as beneficial to both labor and management.

• **Few Thefts**—Federally-chartered cred-



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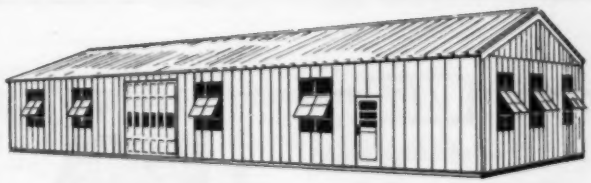
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MIT

Dividend Announcement

Massachusetts Investors Trust

DECLARES ITS

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11 cents a share, from net income, payable April 25 to shareholders of record March 29, 1957.



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it unions are supervised, ordinarily through an unannounced audit each year, by the Bureau of Federal Credit Unions, a branch of the U.S. Dept. of Health, Education & Welfare. State banking departments supervise the state-chartered units. The Credit Union National Assn., a trade group, and state associations help the amateur financiers with advice and courses of study.

Of course, some directors and clerks inevitably yield to the temptation to dip into the till. Two years ago, the Ford Rouge Employees Credit Union, with 15,000 members, was suspended by federal examiners (BW–Sep.24'55, p60), and seven men, including the manager, were indicted. The credit union was closed about a month, but is back in operation with membership and assets at a record high.

On the other hand, in New York, state bank examiners found the books of the Hewitt Employees Credit Union of Buffalo (Hewitt Rubber Div. of Hewitt-Robins, Inc.) in such "horrible" condition last summer that the credit union had to be dissolved. About $10,000 was missing, but the loss was covered by a bonding company. Each of the 651 shareholders was indemnified in full—a total of $265,000—when the union dissolved.

Threat of Lid on Rates Worries Savings Banks

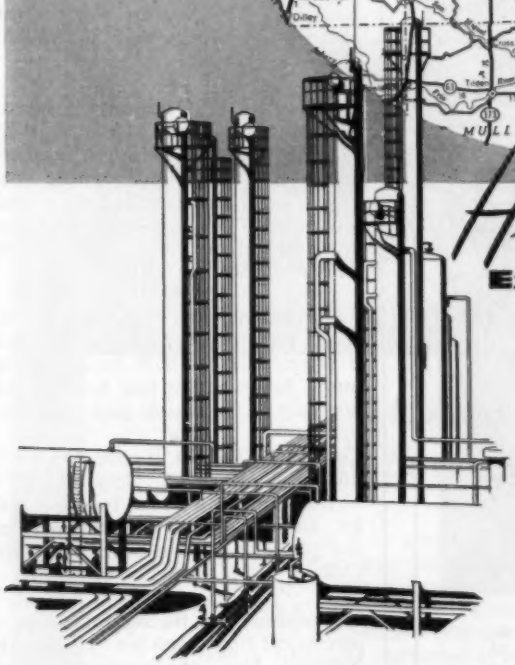
New York savings banks are stewing this week over a bill passed by the state legislature right under the nose of their Albany lobbyist. The measure would limit interest on savings bank deposits to 3% a year, and would permit "extra" dividends above that only to depositors of more than two years standing. Gov. Averell Harriman has not yet said whether he will sign the bill; he has until Apr. 26 to make up his mind.

The move by the legislature caught the bankers flatfooted. Some were already planning to boost the rate to 3¼% from the present average 3%, to meet the competition of two big commercial banks which on Jan. 1 set their savings rate at 3%.

Several of the savings banks had taken steps to publicize the planned increase, but called it off at the behest of state banking superintendent George A. Mooney. Over the weekend, Mooney wrote to 30 New York City savings banks, asking them to hold off announcements until Harriman acted on the bill. Of these banks, 16 had already satisfied the State Banking Dept. that they had the surplus and reserves required to pay higher dividends.

Those bankers who had planned increases feel that the Albany bill discriminates against them. "No one puts





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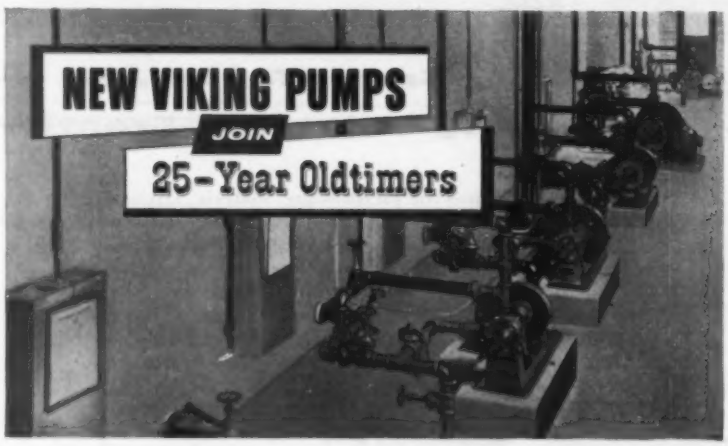
New electronic devices can perform operations as complicated as predicting election results, yet they could never perform the job of the man above. He's a Johnson & Higgins account executive, and he helps solve the insurance problems of commercial and industrial organizations. To this complex and variable task, he brings his own seasoned judgment—and that of several hundred other J&H specialists trained in every facet of the insurance business.

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In Canada, it's "ROTO-KING" pumps
THE ORIGINAL "*GEAR-WITHIN-A-GEAR*" ROTARY PUMP

a ceiling on how much savings and loan associations can pay out," one banker commented bitterly. This week, a New York S&L advertised that it was offering 3¼% annual interest—"the leading rate on savings in New York City."

It was evident that the bankers who wanted to raise their rates had few fears of an impending drop in money rates. They felt that the supply of money might ease slightly later in the year, but were sure this would not affect their ability to pay higher interest now.

FINANCE BRIEFS

A public accountant "must report fairly on the facts as he finds them"; his "responsibility . . . is not only to the client who pays his fee, but also to investors, creditors, and others who may rely on the financial statements which he certifies." That's the warning contained in a ruling last week by the Securities & Exchange Commission.

•

Gillette Co. believes its first-quarter earnings this year will be only $6.8-million, or 73¢ per share. For the year-ago period, earnings were $8.3-million, or 89¢ per share.

•

Those heavy 1956 insurance losses are being totted up (BW—Mar.16'57,p139). For the year, 420 stock fire insurance companies suffered underwriting losses of $523-million, according to a trade publication, The Spectator. The same group had underwriting profits of $80-million in 1955.

•

Philip Morris, Inc. will acquire Millprint, Inc., via an exchange of stock, if shareholders of both companies approve. Millprint last year had $55-million sales in the flexible packaging field.

•

Continental Oil Co. is arranging a $75-million bank credit. Normally, 75% of the company's capital spending goes for finding and developing new oil and gas reserves, says Pres. L. F. McCollum.

•

Californians were the biggest buyers of investment trust shares last year, says the National Assn. of Investment Companies. They bought $240-million in open-end fund shares, 17.8% of the national total. Other leaders ranked in this order: New York, $197-million (14.6%); Pennsylvania, $84-million (6.2%); Illinois, $64-million (4.8%); Massachusetts, $61-million (4.5%).

•

Chicago Pneumatic Tool Co. will split its common stock 3-for-1, and will celebrate the occasion with a 50% boost in the dividend rate.



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The little more you pay for top-quality Nylon Cord Truck Tires will bring you real savings in the long run. Talk it over with your Kelly Dealer or get the facts direct from: The Kelly-Springfield Tire Company, Cumberland, Maryland.

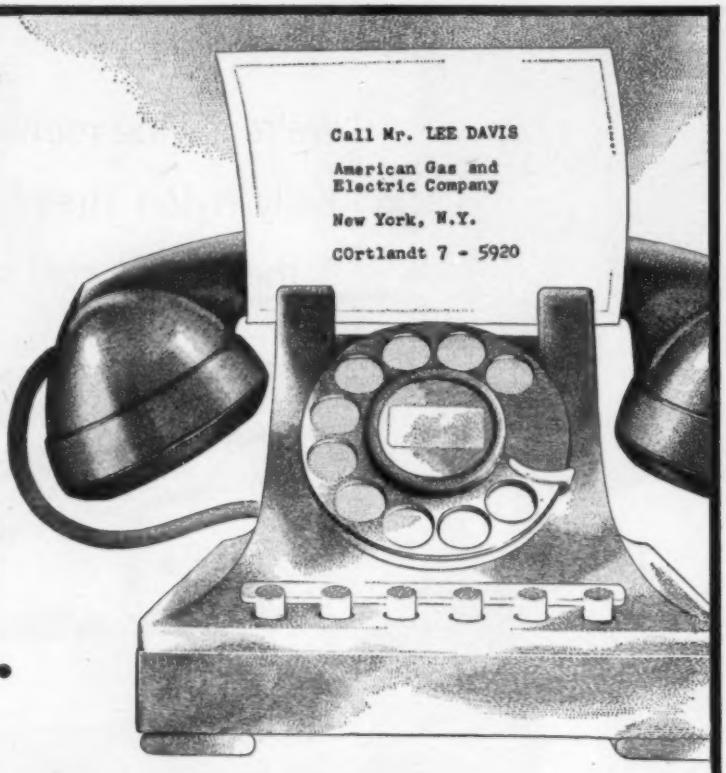


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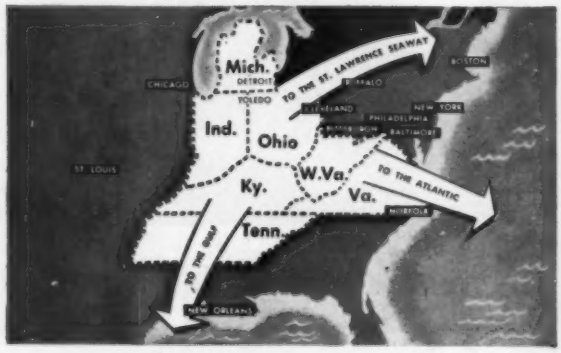
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At the other end of the line, our area development specialists will help you in two important ways. *First* . . . in co-operation with AGE district managers, they will gather complete information and recommend sites that best suit your operations.

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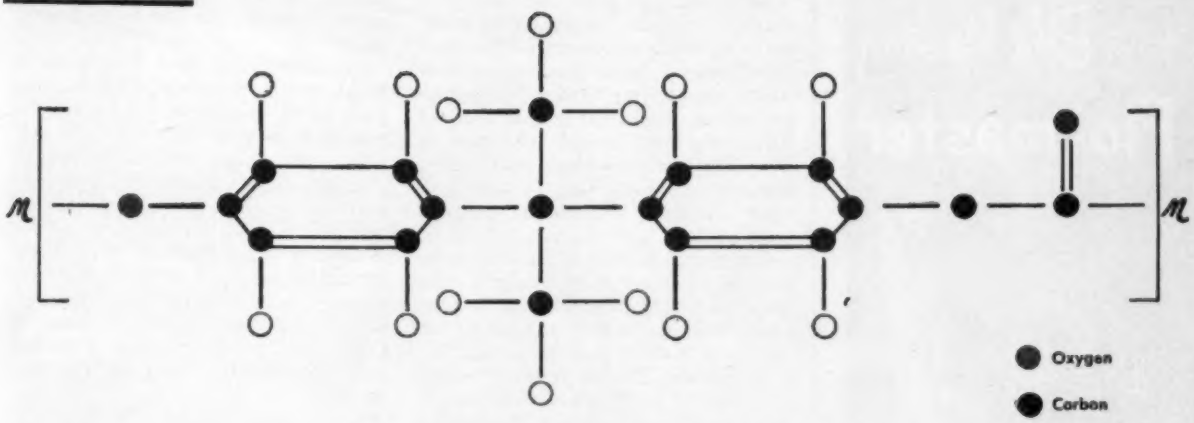
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From plastic research comes this new material—

General Electric's Lexan

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Fluorocarbons | Phenolics | **Polyesters** | Polyurethanes | Epoxies

It's classified as a polyester—but there's a difference

It Could Head a New Family

And it could open up new markets. That's the goal of plastics research, with the field already so competitive.

Chances for an entirely new plastic to catch on are limited, but enough pay off to keep the labs humming.

With General Electric Co.'s announcement of a new plastic—Lexan—this week, the plastics industry gains a potential new material that may someday head its own family. So far, Lexan is still in the laboratory stage, two or three years away from commercial production.

Broadly, Lexan is considered part of the polyester family, but it has distinctive properties as a new type of polycarbonate that may, with further research and development, set it and its cousins apart as a new clan in plastics. However, establishing it as a chemical entity may prove easier than finding its niche in the hotly competitive plastics industry.

That's true of any new plastic. A company that invests heavily in developing a new material is taking a gamble. But many of these gambles pay off.

• **Established Favorites**—Polyethylene, for example, grew to major proportions almost overnight. From 400-million lb. in 1955, production boomed to 558-million in 1956; domestic sales in the same period grew from 350-million lb. to 510-million lb.

The whole plastics business is growing, of course. Production of the synthetic resins and cellulose materials shown in the chart above amounted to more than 3.9-billion lb. in the U.S. last year, and domestic consumption is running between 3.6-billion and 3.7-billion lb. per year (the difference is largely in exports).

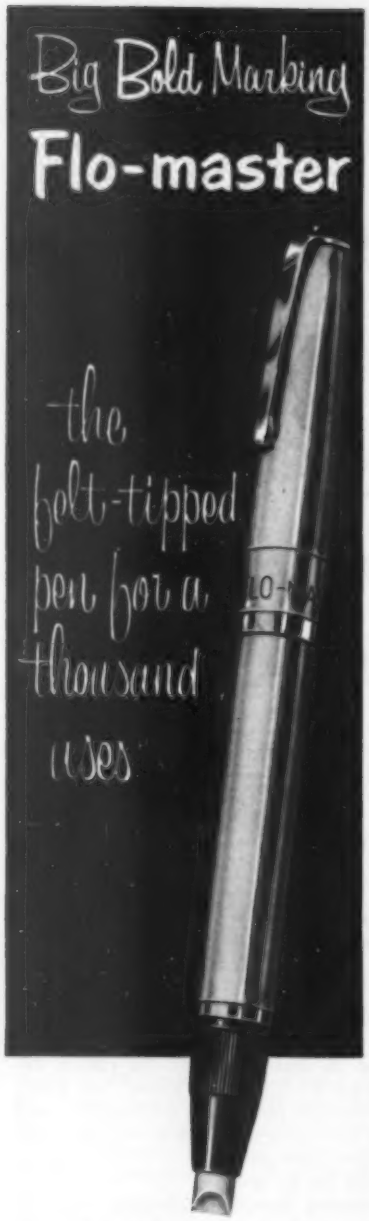
According to the Tariff Commission, which keeps track of such things, last year's plastics business represents a tenfold growth rate for the industry over the past 15 years. That's five times the growth rate of U.S. industry as a whole. And an even faster growth rate is expected for the years ahead: By 1960, production may reach 6-billion lb., and per capita consumption in the domestic market may go to 32 or 35 lb. against about 24 lb. now.

Among the 20 or so basic types of plastics, eight account for the largest production volume and dollar sales. These are the vinyls, styrenes, polyolefins (including polyethylene), phenolics, petroleum resins, ureas, melamines, and cellulosics.

In recent years, the thermoplastic resins (which are relatively rigid at normal temperatures and pressures but can be deformed at higher levels) have made the greatest gains in acceptance by industry. Examples include the polyethylenes, polyvinyl chloride, and polystyrene.

I. Research Under Pressure

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poseful research programs require a heavy investment before there's any assurance of success. According to speakers at last week's Commercial Chemical Development Assn. meeting in New York, research up to the commercial production stage costs on the order of 3% of the total annual sales value of the plastics industry. In a swift-moving industry, it's hard, too, to determine what direction a research program should take.

Yet there's hardly a chemical company of any size that isn't deep in some phase of plastics research and development, that isn't willing to invest fresh money in backing each potentially hot new material. The ranks of the industry's plastics producers are continually being swelled by companies from other industries, too.

• **The Heat's On**—This puts tremendous pressure on plastics researchers. They're hounded by management to turn up new and better materials before the competitors do, yet they know that no new material in an overcrowded field has the slightest chance of breaking into the lineup of seasoned campaigners unless it can offer a unique combination of properties—not an easy combination to find.

Moreover, the market researchers, scrambling to outmaneuver each other with promising new products, put additional strain on their research laboratories. They dream in terms of the plastic house of the future, with its molded one-piece bathroom, and of giant domes that will allow baseball games to be played on schedule despite rain.

Almost before a new plastic starts coming from a pilot plant, market development specialists are dreaming up new markets for it. And new plastics today are introduced with all the fanfare of a Hollywood opening night.

• **Research Never Stops**—Yet research must still go on. Even after a new material has wedged its way into industrial use, producers can't afford to sit tight. If the product is to keep pace with the rest of the field, producers must continue research into improved properties and more economical production.

This has been the case with even the most successful of all plastics—nylon—and with all its younger competitors, such as polystyrene, polyethylene, and the silicones. That's part of the gamble, and it's the situation that faces every new plastic, such as Lexan.

II. Lexan's Family

Advance press notices claim for Lexan many of the properties that manufacturers of plastic products have been asking. The polycarbonates are transparent, colorless, and have unusually good electrical and mechanical properties.

GE researchers claim that Lexan is tough enough to replace metals in many uses, strong enough to stand up under a hammer blow. It also resists heat well, holds its shape, has high tensile strength, resists penetration by either gas or water, and has a hard, smooth surface.

• **Market Candidates**—It is perhaps typical of plastics research that the original polycarbonate chemistry on which Lexan was built came out of GE's search for new, improved insulating materials rather than for structural material.

Other companies, both in the U. S. and abroad, are working on development of polycarbonates. Bayer, in Germany, is among these. Columbia-Southern Chemical Corp., subsidiary of Pittsburgh Plate Glass Co., has been working for years on a line of alkyl polycarbon compounds that are first cousins to Lexan.

However, the chemistry of producing polycarbonates is tricky, and materials like Lexan are sure to be too expensive for many uses. They will have to compete with such established materials as Mylar, in the electrical field, and polystyrene, in cases and hardware for appliances. So the initial market for the Lexan type of plastic may not be spectacular at first.

III. Finding a Market

As each new plastic bursts upon the scene these days, it joins a fight for the market held by earlier comers. Unless it is so unusual that it opens up a whole new market, it must hang on by displacing an older material.

For example, cellulose nitrate once held the market for plastic between the layers of safety glass. Then cellulose acetate came out of the lab with claims of vastly improved properties, and cellulose nitrate was thrust aside. Today, polyvinyl butyral offers safety glass manufacturers the most attractive combination of qualities. Next year, who knows?

• **New Worlds**—To stay out of this rat race of existing and coming plastics, the laboratories aim at finding totally new families of plastics with new markets, rather than contenting themselves with improving the properties of present materials for present end-uses.

Broadened research is beginning to pay off in the aircraft and missiles industry, where use of plastics has been sharply increased. Convair's B-58 Hustler bomber, for example, has honeycomb panels of reinforced plastics as well as honeycombs of aluminum and steel (BW—Mar.2'57,p62). Within the





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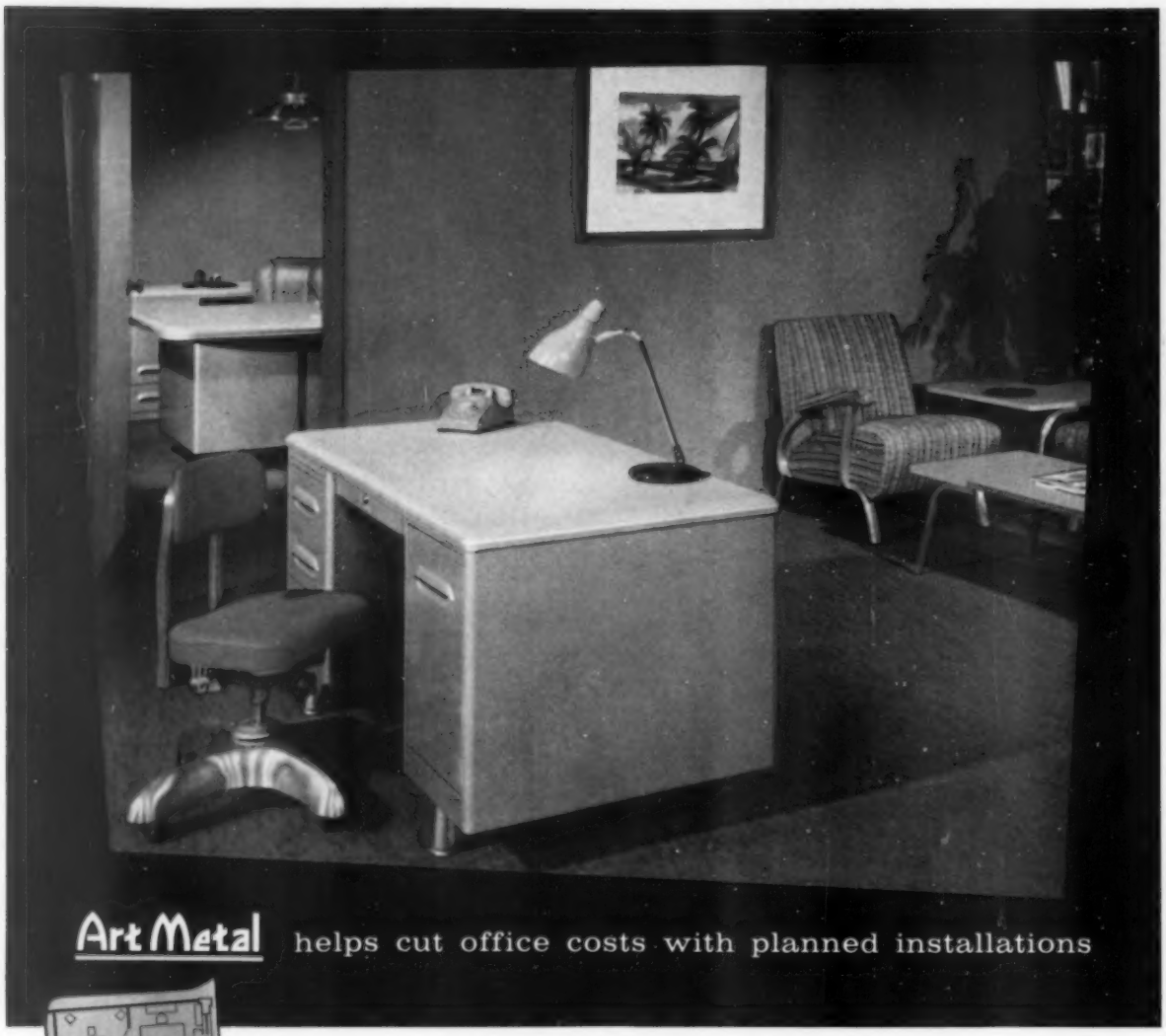
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". . . one aircraft manufacturer is thinking of making the entire nose of a plane out of plastic . . ."

STORY start on p. 99

last few weeks, even more startling uses of plastics have been discussed by the industry.

• **High Flying Plastics**—According to Pres. Herbert P. Buetow of Minnesota Mining & Mfg. Co., some of the new plastics can vie with titanium at temperatures of 600F. One aircraft manufacturer, he says, is thinking of making the entire nose of a plane out of plastic that's superior to metal in heat resistance, strength to weight properties, and low conductivity of heat. The plastic is also easier to form into complex shapes.

For rockets, plastics manufacturers are trying to produce materials that will withstand even higher temperatures, up to 1,000F for one or two minutes, and burst pressures up to 10,000 lb. per sq. in.

• **To Many Tastes**—Food processors are also asking for plastics that can replace tin cans for food that can be cold-sterilized by irradiation. And automobile makers are keeping an eye open for a reinforced plastic with enough impact-resistance to qualify for car bodies.

Laboratories that develop new plastics must keep all these possible uses in mind, yet they face a fearsome task in deciding which qualities of flexibility, mechanical strength, corrosion resistance, low friction, and heat resistance they should build into the material. With specialized users making very specialized, and often conflicting, demands for certain properties, the task of the laboratories gets almost impossibly complicated.

One manufacturer will call for a plastic raw material that is rigid but light, carries heat poorly, doesn't shrink in the mold, has a unicellular foam structure, comes in a wide range of densities, and will adhere to glass, metals, and other plastics. And the next manufacturer will want toughness, good ductility (elongation), high tensile strength, good electrical properties, a high heat-distortion point, and unusual impact strength.

All that any producer can hope to do is to assure himself of a fighting chance with a new material that's versatile enough to contend for a given segment of the market. That's what GE is hoping it has with Lexan, and what researchers in every plastics lab around the country are hoping to find someday, too. **END**



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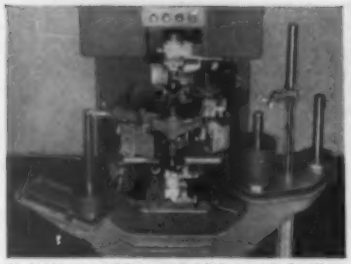
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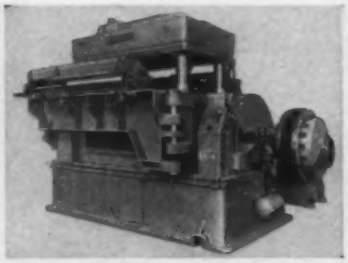
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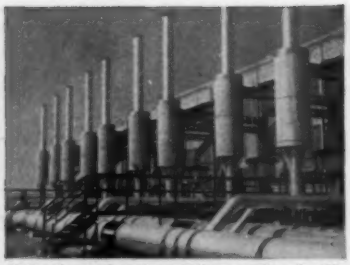
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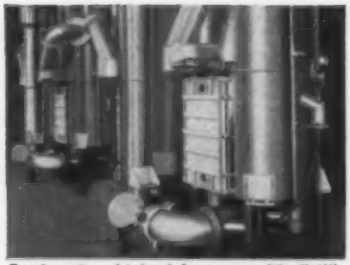


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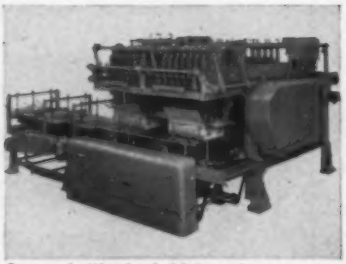


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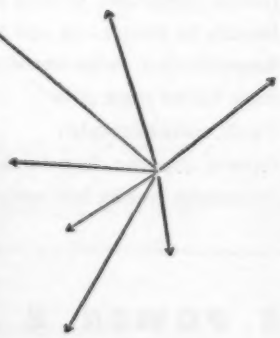


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Sunburn Lotion to Protect a Lake

Chemical film over water cuts evaporation loss in reservoirs, tests indicate; now it's set to be tried out on a big scale.

THE SPLASH above isn't caused by a small boy plunging into a swimming hole. It's cetyl alcohol being spread over a lake in one of many research projects now being run to find out how to conserve one of the country's most valuable resources—water.

The idea is to reduce evaporation from reservoirs and other bodies of water—a loss that translates into dollars in huge sums every year—by coating the surfaces with monomolecular chemical films formed by such substances as cetyl alcohol. Experiments along this line are not new. As early as 1943, Irving Langmuir and Vincent Schaefer of General Electric Co. described substances that would form monomolecular films over water, so tightly as to allow dew to condense on top of them.

• **Test**—It's only this summer, however, that the feasibility of this method on a wide scale will get close scientific and



RAFT with gauze doors is used for spreading cetyl alcohol (in pellet form) over surface of lake; chemist Robert Cruse of Southwest Research Institute lowers anchoring brick.



Specifications for this wire control conduit: must retain flexibility, resist crushing, hold lubricant and exclude dust and water even when flexed frequently.

To meet these exacting specifications, The Weatherhead Company, Cleveland, Ohio, one of the leading manufacturers of brake hose, fittings and flexible controls, selected Keystone Galvanized MB Spring Wire.

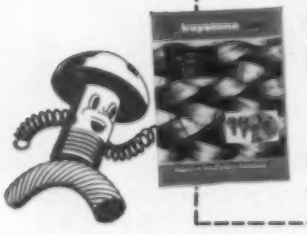
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industrial inspection in the U.S. Preliminary experiments by the U.S. Public Health Service, Bureau of Reclamation, private company laboratories, and other federal, state, and nonprofit research groups have prepared the way. As a result, some scientists are convinced that most objections and problems in the use of these chemical evaporation curtains can now be discounted or overcome.

Much work remains to be done, however, before cetyl alcohol or some other evaporation suppressor can be O.K.'d for general use. Scientists must:

- Nail down final proof that the chemical used isn't toxic to fish, vegetation, plankton, or algae. (Cetyl alcohol, a chemical commonly used in cosmetics, has no toxic effect on humans.)
- Find a cheap, efficient way of controlling those few bacteria that are attracted to fatty alcohols such as cetyl alcohol, and multiply on it. Increase in their number wouldn't necessarily be dangerous, would give water an unusual taste.
- Improvise a practical means of spreading chemical films over large bodies of water.
- Determine how effective the films will be when battered by wind, rain, freezing temperatures, and so on.
- Find out whether there'll be a marked temperature rise in a lake protected by such a cover—a rise that could alter its biological content.

• **Lab Results**—In the laboratory, many of these questions have already been solved—at least to the satisfaction of the experimenters. At San Antonio, Tex., Southwest Research Institute (supported by funds from the Southwest Cooperative Project on Control of Evaporation) has been testing materials to find how well they prevent evaporation. Last summer it moved its tests outside into stock tanks and a four-acre lake.

Much other preliminary work has been done elsewhere—at such places as the Bureau of Reclamation's engineering labs in Denver, North Texas State College, and Colorado Agricultural & Mechanical College. Over-all results show:

- Cetyl alcohol is the most promising of chemicals tried to date.
- In line with experiments in Australia, Great Britain, and elsewhere, it's completely safe, has no detrimental effect on biological life in the water, doesn't inhibit transfer of oxygen to and from the air.
- Alcohol-loving bacteria can be controlled by adding small quantities of copper salts.
- Cetyl alcohol is extremely promising as a self-repairing film. There's no data yet on what happens after freezing, but it's believed the film would re-form after the ice melted, as it does when wind blows it apart.

• **Cost**—From a costs standpoint, SWI



Johannes Gutenberg examines the first proof from his 15th century press.

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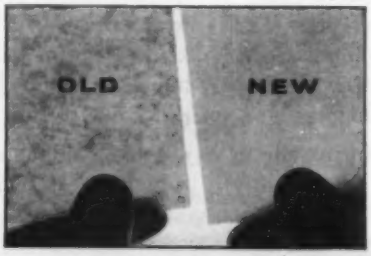
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Printers everywhere use Hammermill papers. Many display this shield.



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figures that the use of a cetyl alcohol film would be practical for large bodies of water, too. Theoretically, if 2.2 lb. of it were floated in a raft with gauze doors (as in the lower picture on page 107), it would be enough to cover a 320-acre lake with a film that would last six weeks. During this time evaporation in the lake would be cut 45%. The cetyl alcohol would cost something like $1.10.

• **Hurdle**—The big problem is how to spread cetyl alcohol over large bodies of water so it will form a skin over the entire surface instead of piling up at the leeward end of the lake. That's what engineers will be working on in experiments starting this month on 2,500-acre Lake Hefner in Oklahoma.

Earlier tests have indicated that a raft will spread a monomolecular film only so far. When the film meets a resistance equal to its expansive force, it stops spreading.

On big lakes it's impracticable to use rafts. So scientists this summer will try other tricks. Some researchers think a projectile might work—one that would burst on touching the water's surface, thereby spreading cetyl alcohol (in flake or pellet form) in a sort of shrapnel effect.

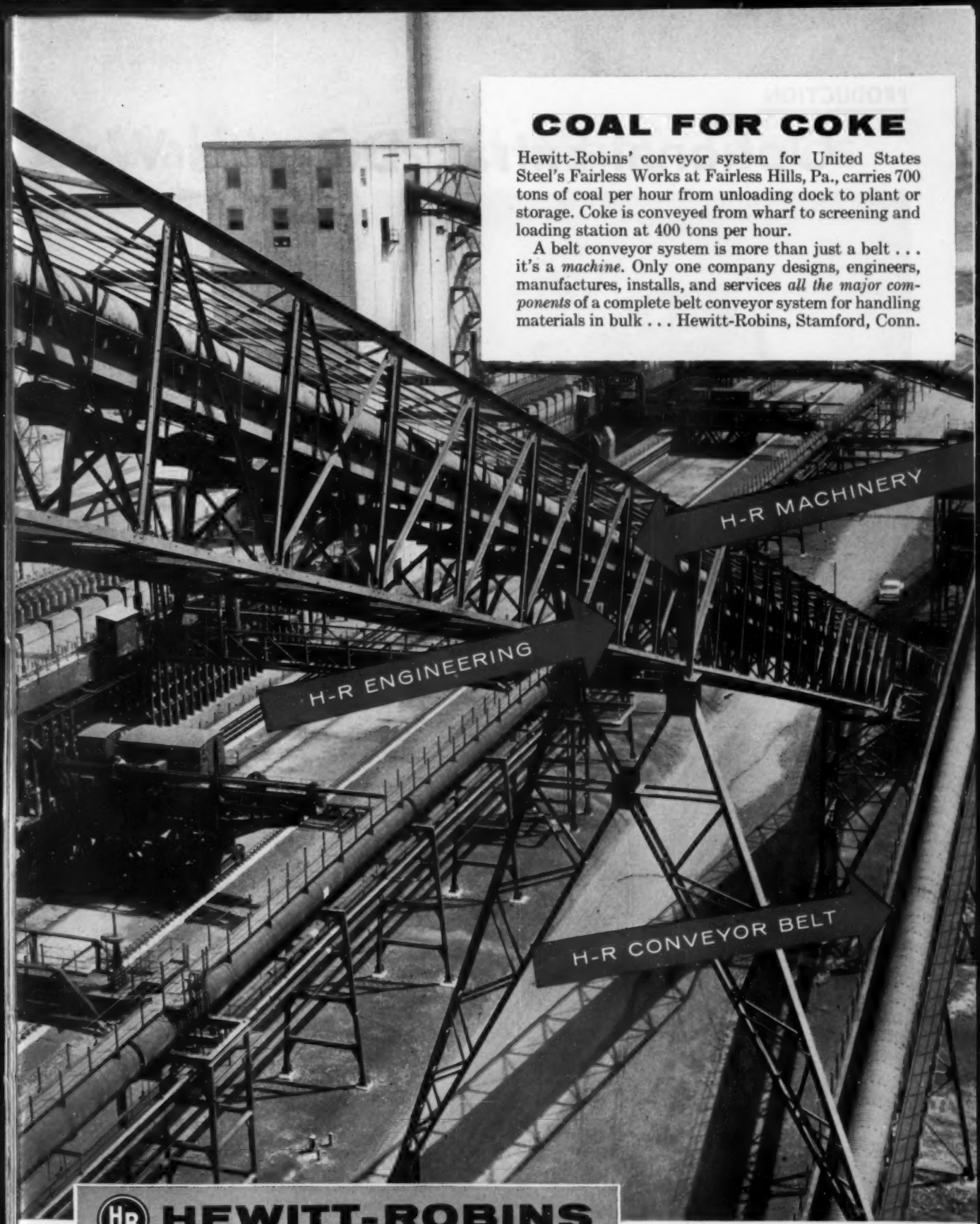
A more likely method for early tests will be to mix cetyl alcohol with a solvent such as grain (ethyl) alcohol, then spread it from a low-flying plane, helicopter, or boat. Ethyl alcohol, soluble in water, would disappear quickly. The cetyl alcohol, insoluble in water, would stay and form its film.

But ethyl alcohol obviously couldn't be used in municipal reservoirs. Researchers will have to find another solvent.

Others are attacking the spreading problem from another angle. Their reasoning: If you can't raise water temperature to make spreading easier, perhaps you raise the temperature of the cetyl alcohol and get the same effect. Such a solution could get water evaporation researchers over the biggest hurdle they now are facing.

• **Saving**—How important their success could be has been variously calculated. Consensus is that every exposed water surface in the U.S. loses about 30 in. of water to the atmosphere each year. A drop of water in a reservoir is worth many in the clouds. And except for a small bit of it that may fall again as rain or snow, a drop of water once risen to the sky is gone forever.

For a city such as Oklahoma City, the annual loss in dollars is a big item. In Lake Hefner (source of the city's water), annual evaporation loss is estimated at 11,000 acre-feet. That's $660,000 worth of water vanished into the sky. A 30% saving—via chemicals—would save some $200,000 of water each year. **END**



COAL FOR COKE

Hewitt-Robins' conveyor system for United States Steel's Fairless Works at Fairless Hills, Pa., carries 700 tons of coal per hour from unloading dock to plant or storage. Coke is conveyed from wharf to screening and loading station at 400 tons per hour.

A belt conveyor system is more than just a belt . . . it's a *machine*. Only one company designs, engineers, manufactures, installs, and services *all the major components* of a complete belt conveyor system for handling materials in bulk . . . Hewitt-Robins, Stamford, Conn.

HEWITT-ROBINS

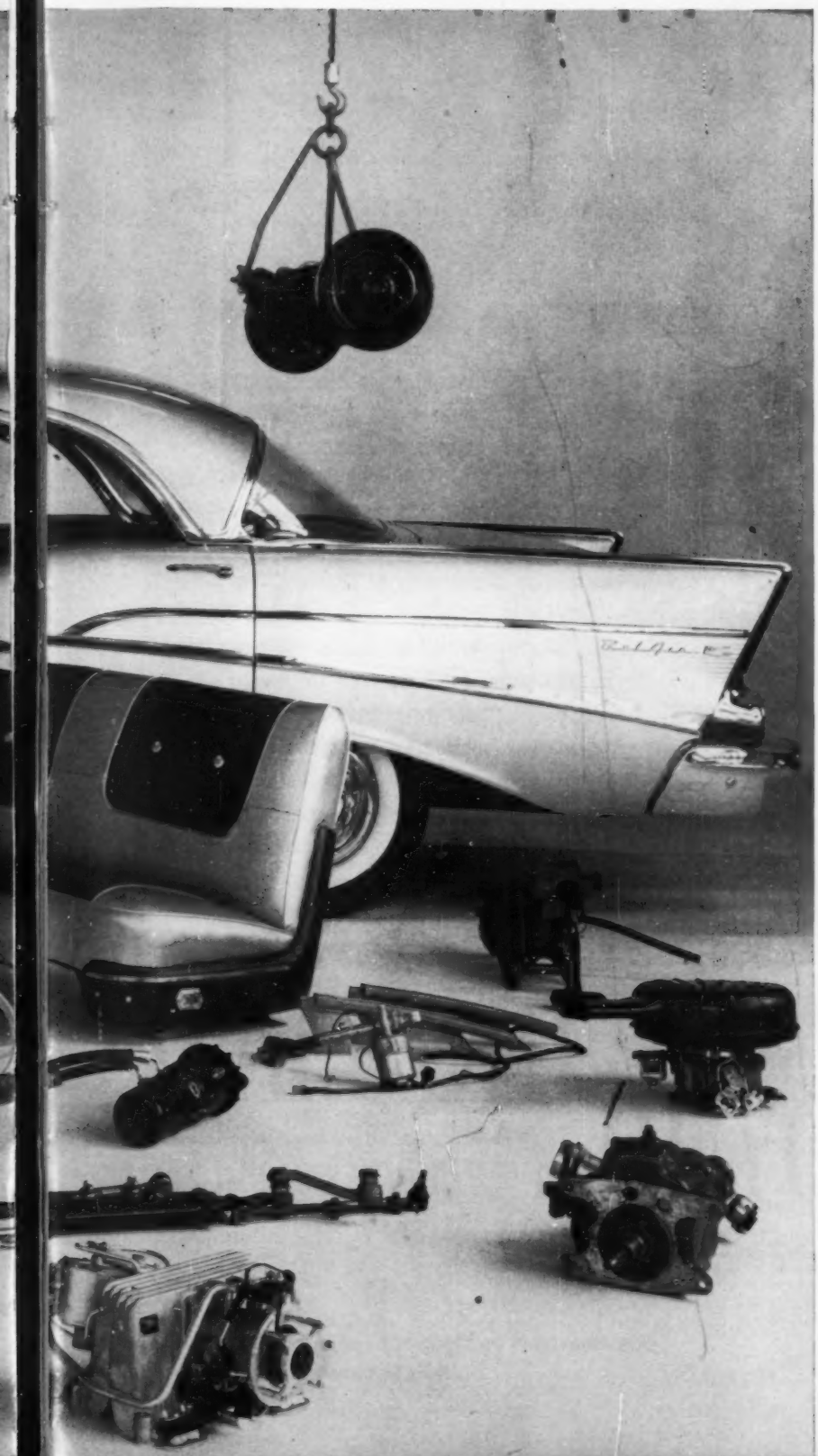
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PRODUCTION

Optional Extras: Detroit's Way



of Making Cars Fit Many Tastes



Manufacturers are aiming at something like five markets. So they assemble cars from standard building-blocks—basic parts that are optional.

"You don't mass-produce automobiles any more," says a Detroit executive. "You mass-produce parts."

The picture gives you an idea of what he means. The basic Chevrolet, seldom seen on the road in its stripped-down state, comes with or without any or all of the components that are linked with it. Depending on how many of the options the buyer picks up, the factory-suggested price can range from about $1,700 to nearly $4,000.

Not so many years ago, Detroit offered a standard, a de luxe, and maybe a super de luxe or "custom" model in each line. Now the word "standard" has dropped from the auto industry's vocabulary. If you want the least expensive, least powerful, least automatic, least chromed, and least-gadgeted car, you're buying a "stripped" model. For anything else, you deal with the automotive building-blocks known as options and extras.

• **Basic Elements**—Says Victor G. Raviolo, Ford Motor Co.'s assistant director of engineering: "We build standard parts and elements from which we can assemble a great variety of automobiles."

And these elements—alternate engines, transmissions, rear axles, and various power assists—are far more basic to the kind of car you buy than the true options and extras such as radio, heater, and paint patterns.

The package of options has a stunning impact on the kind of car you drive—and on Detroit's new way of building cars.

• **Step-by-Step Change**—Now that Detroit has learned how to make its standard building-blocks, efficiently and economically, to fit into a variety of finished products, the industry can introduce more mechanical variations than ever before without changing the basic automobile.

Instead of dramatic new "cars of the future," you'll see more new features sneaking into current models as optional equipment. It's more like buying a prefabricated house—you are offered a standard lot and foundation; then you choose your own floor plan and built-in equipment.

That's a long way from the days when Detroit offered even lights and



A HAIR IS A TREE

In the microscopic world where measurements are in millionths of an inch, a human hair is like a tree. This is the working world of the Waldorf Instrument Division of F. C. Huyck & Sons (pronounced Hike) where production parts are machined to fit with tolerances down to 50 millionths of an inch. Their electronic circuitry can count 1 part in a million, or time a millionth of a second. Waldorf analog computers can track a simulated airplane with an accuracy of 3 inches per mile. On the other hand, Waldorf engineered and produced servo-actuators can convert an ounce of pressure into a force of 8000 pounds.

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Waldorf experience includes the engineering and manufacture of instruments, computers, precision controls, test devices, simulators, servo-mechanisms, valves and actuators. These can be applied to solve your problems whether military or commercial. For brochure and further information, write to Waldorf Instrument Co., Huntington Station, Long Island, New York.

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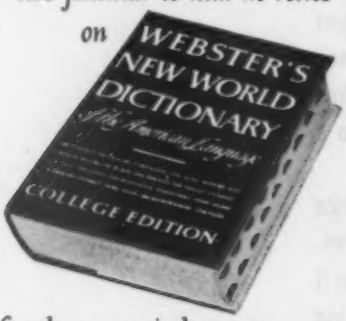
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bumpers as optional extras. But few outside the industry realize how far it has moved since Henry Ford's Model-T heyday of "any color as long as it's black." Today's production strategy is: Make every brand of car sell to the broadest possible market.

I. A Car for Every Taste

"We build for five markets," says Edward N. Cole, General Motors Corp. vice-president and general manager of the Chevrolet Div. "To be successful, you have to have everything."

Like Chevrolet, every other low- and medium-priced auto factory goes after these five markets—not with entirely different cars but the combinations of options it offers. It produces for buyers who are primarily interested in:

Economy. Chevrolet, for example, offers them the 6-cyl., manual-shift Model 150—cheap to buy, cheap to run.

Economy but something more, too. These people have misgivings about the "stripped" car, despite their profession of interest in economy. So Chevrolet builds a Bel Air with chrome and the fanciest interior, but still with a 6-cyl. engine and manual transmission.

Luxury but modest performance. For this increasing market, Chevrolet builds a Bel Air with V-8 engine, automatic transmission, power brakes, power windows, power seats, air conditioning, a load of chrome and multi-toned paint —you couldn't get more "extras" in the highest-priced car.

Performance. Chevrolet has several high-powered optional engines, dual carburetion, and fuel injection, to be installed in any series of car. For this market, even American Motors Corp. offers a fuel-injection V-8 engine in its Rambler.

High performance plus maximum luxury. Chevy also puts its engine options into a Bel Air series loaded with power gadgets and trim.

• **Product Mix**—The manufacturers alone know how much of the total market each of these five segments makes up. They guard their secret closely, to avoid helping the competitors to pinpoint their sales campaigns. It's generally understood, however, that in the low-priced field, the most costly line, such as the Chevy Bel Air or the Ford Fairlane 500, takes 35%-40% of production, the middle series about 50% of production, and the most austere line, 10%-15%.

Something is known, too, about sales of the chief mechanical options. Ward's Automotive Reports says that last year 27% of all new cars were equipped with power steering, 24% with power brakes, 75% with automatic transmissions, and nearly 60% with V-8 engines.

• **Combinations**—In engines and transmissions alone, the buyer has a bewildering choice of combinations:

• Six cylinders with (1) manual transmission, (2) manual transmission and overdrive, (3) automatic shift.

• Eight cylinders with the same three options in transmissions and, for Chevrolets and Chrysler products, still a second kind of automatic shift to consider.

• "Power packs" to give still higher engine performance: fuel injection, four-barrel carburetors, three two-barrel carburetors, superchargers.

In all, the buyer can choose among as many as 15 different engine-transmission combinations. Yet all the cars in a product line come off the same assembly line, use the same frame and basic body (though these are sometimes stretched, as in the biggest Fords).

Generally, the frame remains the same. But the variations aren't limited to engine and transmission, power gadgets, body styling, and paint. They are spreading to other mechanical parts. In 1955, Packard brought out its torsion-bar suspension as standard on the highest-priced line and optional on the others. Last year, Studebaker introduced a "non-slip" differential as optional equipment, offered this year also by Chevrolet.

II. Laying the Foundation

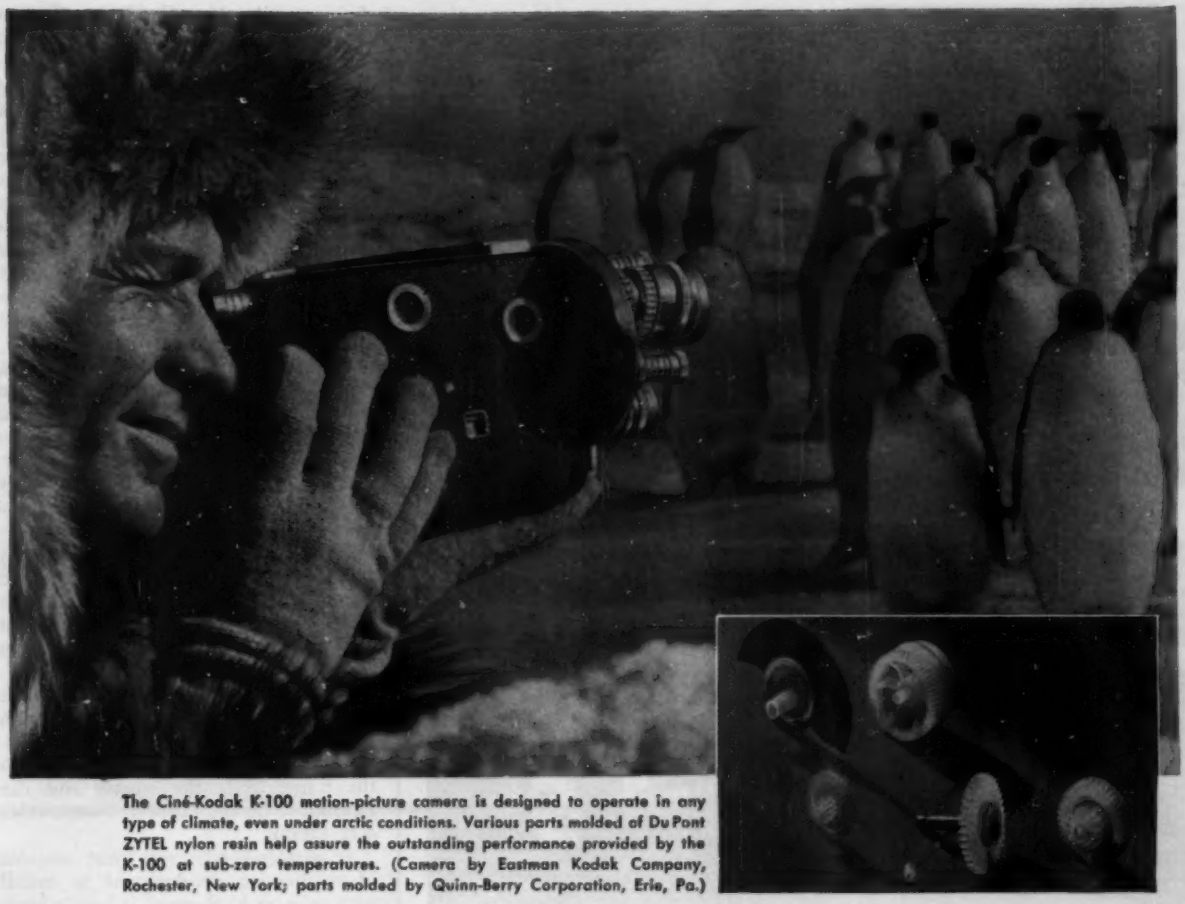
Now the chassis itself, the automobile's undercarriage, is being redesigned for different kinds of suspension, different arrangements of transmission and driveshaft. And a change in design of the frame is going to affect the styling of future cars. Cadillac's 1957 frame shows the direction of the change.

• **The "X" Frame**—Most auto frames are roughly rectangular. Two long rails form the sides, short rails close the ends. But the new Cadillac frame is x-shaped, with no side rails. Where the legs of the "x" cross, there's a tube for the driveshaft. This frame design permits the body to be lowered.

Most car manufacturers stick to the box frame but spread the side rails farther apart, dropping the 1957 bodies in between. Cadillac engineers in effect draped the body over the tube where the legs of the "x" cross.

This has a special advantage for Cadillac, which produces cars of four different wheelbases. To change the length of the frame, Cadillac need only alter the length of the center tube.

• **More Choice**—There are other ways to achieve this kind of flexibility in assembly, but Cadillac's way demonstrates that a large part of the industry —General Motors—is headed toward a type of frame that permits still more options for the buyer. Cadillac's El Dorado brougham, for example, offers an air suspension system on the same



The Ciné-Kodak K-100 motion-picture camera is designed to operate in any type of climate, even under arctic conditions. Various parts molded of Du Pont ZYTEL nylon resin help assure the outstanding performance provided by the K-100 at sub-zero temperatures. (Camera by Eastman Kodak Company, Rochester, New York; parts molded by Quinn-Berry Corporation, Erie, Pa.)

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frame as the other Cadillacs. Chevrolet's 1958 models, and maybe Pontiac's, will have the same versatility.

You don't need the x-frame to offer optional air suspension systems. Chrysler and Ford may also offer them in their 1958 cars, with the conventional box frame. But Cadillac seems to think interchangeability is easier in production with its frame. And little structural change would be needed to go to another future development: rear-mounted transmission. The tube at the center of the "x" would merely have to be moved forward.

According to some Detroit reports, Chrysler may put the transmission in the rear on some 1958 models. This would permit a smaller tunnel down the center of the car for the driveshaft. It would also allow the body to be lowered by inches without reducing the ground clearance.

• **Split Axles**—There's one other way to reduce both the over-all height and the size of the hump down the center of the car. That's to adopt the split rear axles that are commonly used in European cars.

The big tunnel is necessary for the driveshaft to move up and down with the differential, rear axle, and wheels. If the differential is fastened firmly to the frame, only the wheels and the axles move up and down as the car rides over bumps.

It wouldn't take any great amount of engineering development to install such axles in U.S. cars. It hasn't been used in the U.S. so far because there were cheaper ways to lower cars' height.

• **Integrated Body**—Cadillac's frame and suspension system, or adaptations of it, is likely to become standard on all General Motors cars. The body that's used with it is so strengthened that the combination becomes a sort of semi-integrated frame and body. Elsewhere in the industry, there's a move toward the fully integrated frameless body, already being used by American Motors.

This, too, is a standard European feature, resisted by the big Detroit companies partly because of the cost of retooling for such a design. Now the dam is breaking. The 1958 Lincoln will have an integrated frame-body, and so will the Thunderbird. Ford cars will get a completely new body in 1959, and this, too, may be frameless. Chrysler hopes to string out its 1957 body shell at least through 1959, so it might be 1960 before it could switch, if it wanted to.

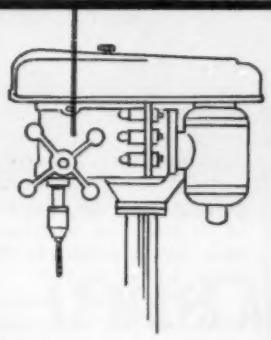
III. Styling Race

The industry is on the eve of several years of styling competition with the roles reversed between leader and challenger.

In 1954, General Motors adopted

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There are more hand fed drill presses in use than any other machine tool. They are all pretty much alike. The operator positions the work in a jig or fixture, feeds the drill in and out of the work by turning a star wheel by hand, and removes the work from the jig.

A good workman can drill a clean hole. But not too many of them. It's a tiring job. Towards the end of the shift both quality and quantity suffer.

Let's put a Bellows Drill Press Feed on the star wheel shaft. Now, the operator touches a lever. Automatically the drill is fed in and out of the work, under perfect control. Production is increased 20%-30%; quality is better; tool life longer.

Let's go a step farther. Add a Bellows Rotary Feed Table. Now all the operator has to do is load parts. The table automatically positions the part under the drill. the drill press feed automatically feeds the tool, the table indexes to eject one part and position another. Production is more than doubled, often more than tripled.

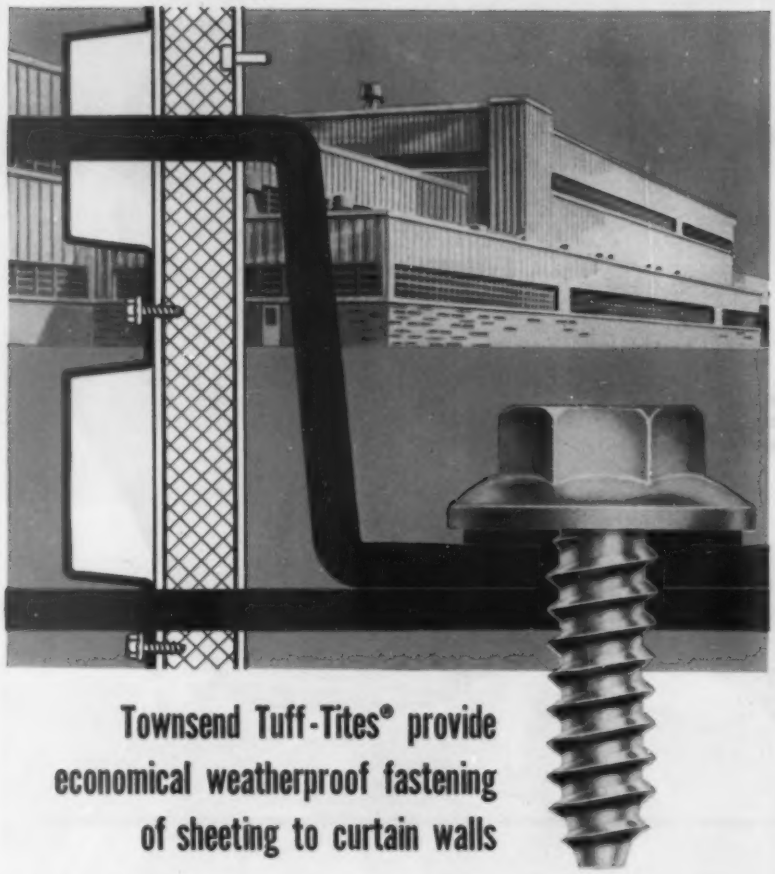
How much does such a set-up cost? Roughly five weeks wages of an operator buys it. Actually it costs nothing. It pays for itself, often with the first week's cost savings.

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what some stylists call the "loaf of bread" design—boxy, with rounded corners and surfaces. GM held to this theme this year in the face of frantic changing at Ford and Chrysler to new styling motifs. Ford features what its vice-president for styling, George Walker, calls "crisp" lines (flat instead of rounded surfaces) and heavy sculpture in its sheet metal; Chrysler makes the high, flaring fin its identification mark. Both are enjoying record sales.

• **The Big Changes**—You can expect Ford and Chrysler to develop their existing styles—Ford to refine its distinctive roof lines and rear fender sculpture, Chrysler to shrink its fins from their 1957 exaggeration and to re-integrate them into the total design.

Now it's GM that will be doing the major style revamping, hunting for a catchy new theme. In the next few years, GM may make bigger changes from year to year than either of its major rivals, may bring to production some of its "dream" cars, as Mercury did with its Turnpike Cruiser. In 1958, for example, Chevy will introduce its Impala, modified from a 1956 Motorama show car, possibly to answer Ford's introduction of a four-passenger Thunderbird.

• **Behind the Strategy**—These styling pressures are closely linked with the matter of the integrated body. Most stylists prefer the unitized body and frame—with no frame members to contend with, the floor can be dropped as low as the driveshaft and differential permit. On the other hand, production people say you can't switch body designs so readily.

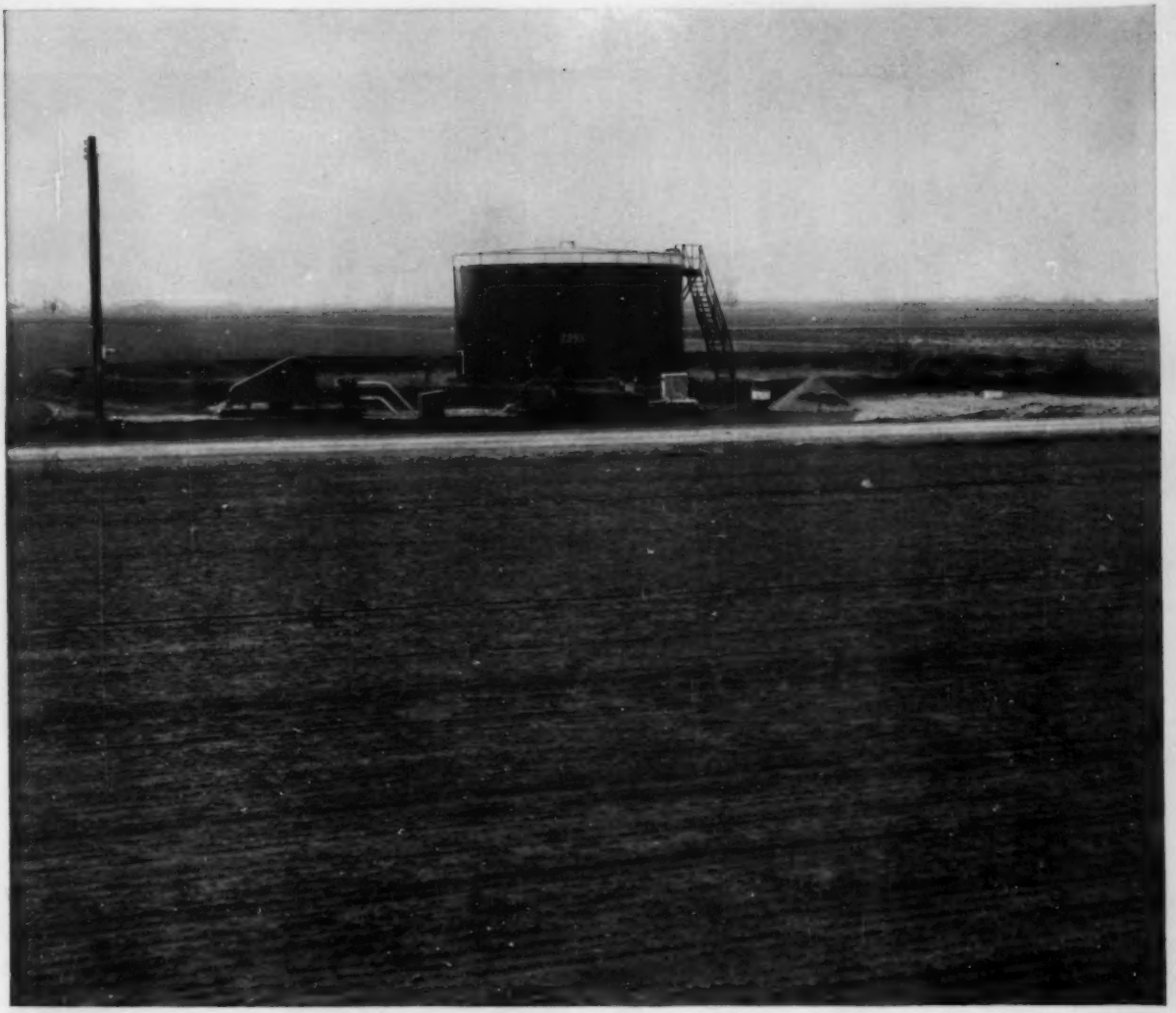
With its prospect of fast design changes, GM finds this a reinforcement of its resistance to frameless construction. So the pattern for the near future seems to be plain:

• For GM, semi-integration of frame and body and a bewildering series of optional mechanical features.

• For Ford and Chrysler, a shift toward integrated body and frame, with fewer mechanical options, but still enough to meet the competition.

• **Cars of the Future**—Many thoughtful men in Detroit, like Raviolo of Ford, predict the day when the auto industry offers three distinctly different kinds of automobile: (1) a highway cruiser, big, powerful, with accent on comfort; (2) a suburban car, possibly adapted from the station wagon, light and economical to operate but still with good performance, and (3) a personal car for one or two passengers, very low in power and very economical to operate.

And the payoff is this: All three types of car could come off the same assembly line, whether they had frames or not. The basic unit would be the same—only the building-blocks would differ in size and in nature. **END**



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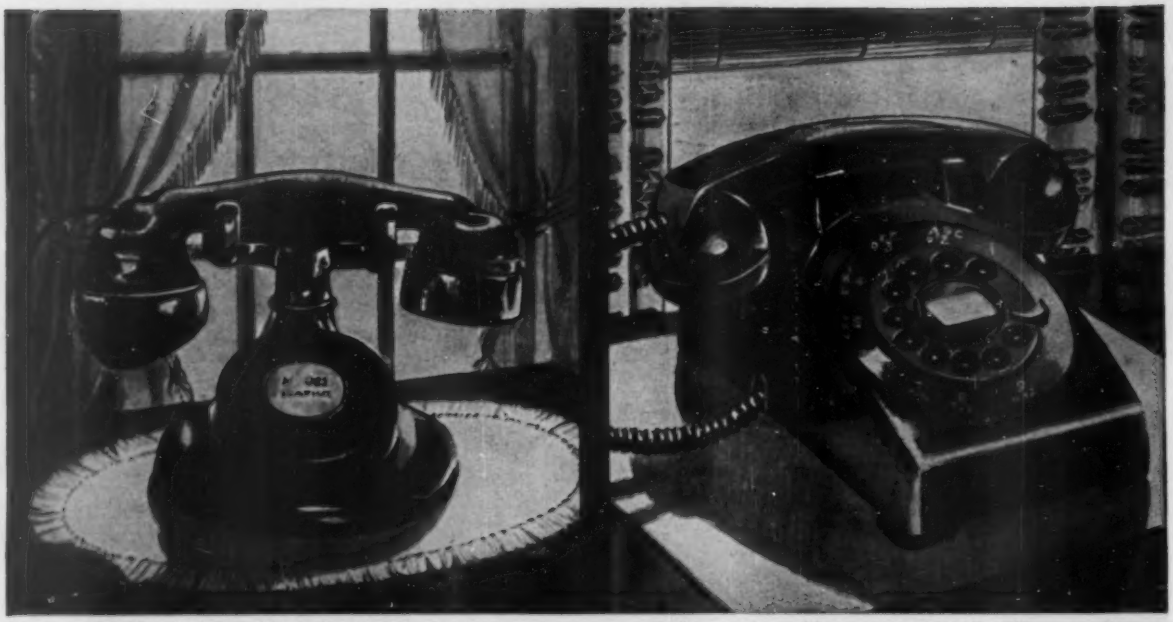
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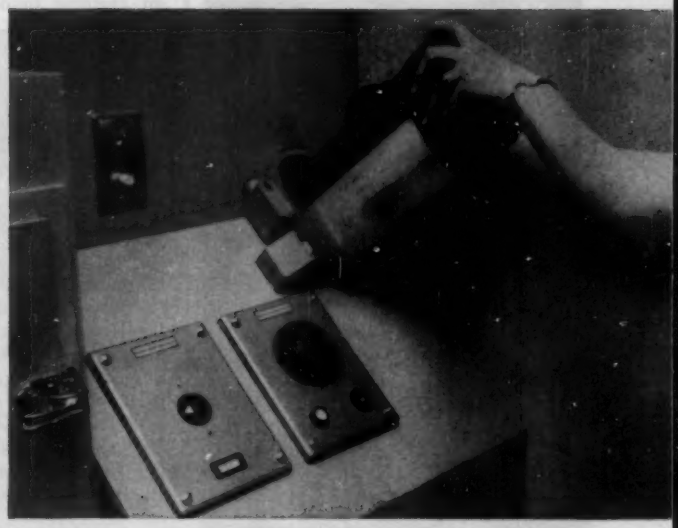
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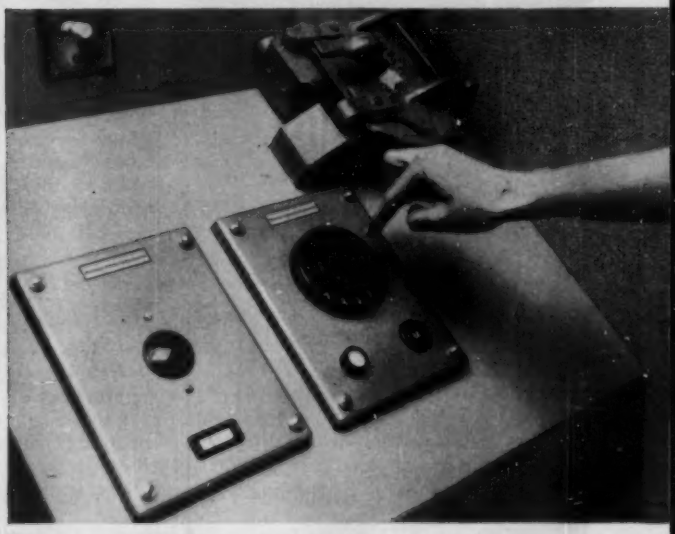
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3. Flick of a dial automatically shunts it to its destination.

Pneumatic Tubes Get Hep

Automatic control mechanisms are bringing tube carriers back into vogue for handling interdepartmental mail.

NEW-FOUND sophistication has made the pneumatic tube—the familiar sales slip carrier of the old-fashioned department store—almost unrecognizable. What's more, the new look is helping to bring the tubes back into vogue.

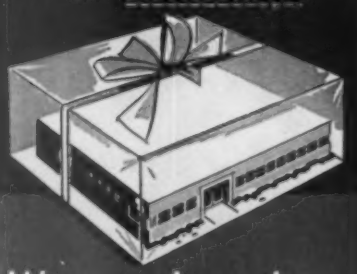
The latest systems combine the wizardry of the telephone circuit and the railroad dispatcher's art. Plastics-walled carriers are now dialed to their destination, automatically switched at a central control station to the right outgoing line, and then automatically popped out at the right station. Built-in controls prevent traffic jams within the tubes, signal maintenance personnel in the event of trouble, and even pinpoint the spot.

• **First Installation**—So far, the only dial-controlled system in actual operation is in the White Plains (N. Y.) headquarters of the Standard-Vacuum Oil Co. Others, however, are in process. The Guaranty Trust Co. of New York is installing a 6-line, 31-station system as part of renovating its main office and last week the National Bank of Detroit ordered a similar system.

Standard-Vacuum's system—3 lines, 20 stations—costs approximately $190,000. It was designed and built by the International Standard Trading Corp., a fully owned subsidiary of the International Telephone & Telegraph Corp. Since that time, IT&T has formed a separate subsidiary, Airmatic Systems Corp., to handle and promote its pneumatic tube systems.

• **Big Advantage**—Automatically switching the pneumatic tube carriers around as if they were telephone calls has one big advantage. Each branch, or line, only needs one sending and one receiving tube, even though it may serve up to 10 stations. New stations can be added on by just tieing in to the end of

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Box 1719-E, Atlanta, Ga.

an existing branch—up to that line's limit.

Old-style, manually operated pneumatic tube systems required one sending tube and one receiving tube for each station—plus an operator at the central control station to shuttle the carriers from one tube to the other. The complications involved in installing such a vast network of tubes, and the need to run a pair of lines all the way back to the central station everytime you wanted to add a station, for years limited the use of pneumatic tubes to comparatively simple installations.

• **Life Saver**—"Automating" the pneumatic tube has probably saved it from extinction—at least in office installations. The "telephone dial" system—with the controls built into the wall of the sending station—is the ultimate. But there are other less refined systems in operation. In these, the dial control mechanism is incorporated right into the carriers. A twist of the wrist sets the station—and at the same time sets in an electrical configuration of contacts. When this type of carrier hits the central switching position, it is momentarily grabbed and read by a sensing device—relays are activated—and the carrier is off to its destination.

Moving the "dial" off the carrier and onto the wall has several hidden advantages. It makes it possible to install sender locks. These automatically keep the carrier from being sent off until there is room in the line for it. And, of course, it reduces the cost of the carriers. This is an important saving because the carriers are really the only part of the system that ever wears out.

• **Simple Traffic**—The old-style carriers—of the department store variety—are still in demand for a variety of uses that do not lend themselves to automatic systems. Traffic in these systems is usually comparatively simple, often is one-way.

Newspaper offices use such systems to get their copy out to the composing room. Large libraries use carriers 6 by 12 in. on end to transport books from the stacks to the front desk.

It was not until automatic systems were imported from Germany in 1950 that the pneumatic tube systems started to realize their possibilities. The brand-new telephone automatic systems are just a refinement of these older automatic systems.

The first installation in the U.S. of the old-style automatic system was in 1951 at the Bridgeport Brass Co., Bridgeport, Conn. The company uses its system to speed metallurgical samples from two separate plans locations to physical and chemical testing laboratories in the main building, and for routing some of the daily load of paper work from place to place within the plant. Since that time, at least a dozen or more of these dial-carrier systems have been installed throughout the country, many of them in hospitals.

• **Complex Applications**—The fully automatic systems are only useful when you have large interdepartmental traffic, according to W. R. Stieber, the general manager of Airmatic Systems Corp. Standard-Vacuum, for example, can use such a system to take full advantage of its central filing and remote dictation-transcription systems. Its large volume of overseas cables (5,000 per month) also are assured prompt delivery. All in all, the system handles about 2,800 carriers a day, but it can handle up to 1,500 an hour.

The carriers for Standard-Vacuum's pneumatic tube system are oval-shaped, 4 in. by 7 in. on end, and 14 in. long, which makes it possible to transport file folders throughout the system without bending them. The carriers can also be used to transport office supplies up to 7 lb. in weight.

Fully automatic pneumatic conveyors—utilizing air pressure and/or vacuum—are the most sophisticated of the air conveyor line—but they are also extensively used in industry as bulk conveyors. Foundry sand, electric bulb cases, cans, nuts and bolts, are among the materials conveyed in bulk.

PRODUCTION BRIEFS

A vast skeleton of aluminum—and blue sky—is being groomed to replace the traditional Big Top. Ringling Bros. and Barnum & Bailey will use the contraption to hang up its trapezes, pedestals, and high wires for aerial acts during its outdoor appearances.

•

Prefabricated housing will be "the biggest industry in the country within 20 years," according to industrial designer Paul McCobb. At a design symposium sponsored by the American Society of Industrial Designers, McCobb predicted mass-produced prefabricated homes will include such refinements as automatic windows and built-in furniture. When? "Any time the builder or mortgage lender wants to," according to McCobb.

•

New textile looms developed by American Viscose Corp. use solid explosive pellets or gasoline to drive the shuttle back and forth. The company is offering to license basic patents on the two new types of shuttle power—solid explosive charges delivered on papertape, or gasoline compression cylinders. Power-driven shuttles could eliminate the sensitive "picker stick" that is used on present looms, and that would reduce vibration and cut the number of loom parts by 35%.

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THIS IS NATIONAL STEEL

To education's three "R's" now add *driver training*

Public school behind-the-wheel courses teach driving dexterity — war on human cussedness



Dr. Herbert J. Stack

New York, N.Y. — Next time you growl "Teen-ager!" at a reckless driver—think twice, won't you?

Think of the magnificent job so many of our schools are doing these days in student driver education. A job that has already proved so effective that repeated state studies have shown reductions of 50% or more in accidents and traffic violations involving the trained young

driver compared to the non-trained driver in the same age group.

Here, *provably*, is a project finding such ready acceptance the nation over that we may well see—in our own lifetime—an entire generation of teen-age drivers as schooled in safe driving as they are in education's traditional three "R's."

Driver Education Fast Spreading

A pioneer in promoting skilled driver instruction programs in our schools as far back as the '30's is Dr. Herbert J. Stack, Director, Center for Safety Education, New York University. Warns Dr. Stack bluntly:

"Don't blame the automobile for our accident rate. Faulty driving behavior, violations of regulations, bad driving practices—excessive speed and improper passing — these are the basic causes of 70-80% of our accidents."

To help counteract these faults, as Dr. Stack points out, in the past 10 years some six million teen-agers have received official courses in instruction as part of their high school education. Instruction in driving skills, yes. But vastly more important, instruction in *good driver attitudes*. In a sense of social responsibility. In consideration for others when behind the wheel.

Last year, more than a million youngsters, and some 78,000 in public adult schools, participated. At least 15 million more will be so trained in the next 10 years. Over 80% of schools now offering such courses provide both classroom instruction and practice driving.

Public support of these heartening statistics has been striking. New car dealers provided 9,253 cars (valued at almost $21,000,000) for high school training programs in 1955-56. Seven hundred more schools thus were enabled to give complete student training.

The States Taking Over

Also, seven states now provide financial aid to schools to help defray education costs (costs which are only a drop in the bucket compared, for example, to our new 50 billion dollar Federal aid highway program). Insurance rates are reduced for students passing the courses. Grants from manufacturers and businesses of various kinds have further helped to boost the program. Teacher preparation courses, too, are now widely offered in colleges throughout the country.

A crusade? Driver education is fast becoming one! Where it counts most, too—with the brand-new drivers of today's superlatively engineered automobiles, the manufacturers of which are ceaselessly striving to make driving ever easier, safer.

National's Role

We at National Steel take a profound interest in the vital contributions of school driver instruction projects, because of our special pride in the great contributions of the automobile to the health and prosperity of our people and our nation. For National Steel, through three of its major divisions—Great Lakes Steel at Detroit, Michigan, Weirton Steel at Weirton, West Virginia, and The Hanna Furnace Corporation at Buffalo, New York—is an important supplier of the steel and iron used by automobile manufacturers.

Our constant goal—through research and cooperation with the automobile industry—is to make better and better steel for still greater safety, strength and economy in the cars and trucks of today and tomorrow.

NATIONAL STEEL

THIS IS NATIONAL STEEL

GREAT LAKES STEEL CORPORATION
WEIRTON STEEL COMPANY
STRAN-STEEL CORPORATION
THE HANNA FURNACE CORPORATION
HANNA IRON ORE COMPANY
NATIONAL MINES CORPORATION
NATIONAL STEEL PRODUCTS COMPANY

NATIONAL STEEL CORPORATION
GRANT BUILDING PITTSBURGH, PA.



Bane of new drivers and many old-timers alike—parking! Today's driver education courses give every student a thorough grounding in the technique, within limited areas bordered by other cars and by guide flags to duplicate cramped parking spaces.



Detroit's high school students take 32 hours of classroom instruction, too, on driver responsibility, traffic regulations, elementary automotive mechanics. Here, a psycho-physical testing device times students' speed of reaction to sudden driving emergencies.



Actual street driving conditions are simulated in this off-street multiple-car training area at Detroit's Mumford High School. In its day program alone, some 864 students are certified each school year—in contrast to on-street driver training programs, which "graduate" about 120 students a year per school.



COME TO WISCONSIN!

a good place to build a business

Wisconsin is the focus of one of the richest markets. Within 24 hours, by rail, air or truck, shipments span a twelve-state area where 60 per cent of the nation's spendable income is earned. The area is tops in population, payrolls, retail sales, values added by manufacture and value of farm products.

Wisconsin's Great Lakes ports provide water routes to foreign markets —which the coming St. Lawrence seaway will vastly expand.

Skilled manpower abounds here, and *it will continue.* Wisconsin is largely peopled by descendants of the best of Old World craftsmen.

a good place to live and raise a family

Here, mastery of his craft earns a man respect and dignity. His good citizenship guards Wisconsin's famous good government. He owns his home (*in six cases out of ten*), supports his church, obeys the law (from five to *eighty per cent* better than the national average).

One more thing. In Wisconsin, when work is done, a family can be *having more fun,* in fewer minutes, in more ways, with less trouble, than almost anywhere else.

a good—a wonderfully good—place to be

More than ten thousand lakes and streams, unspoiled woodlands, fine climate, pure water, good roads—what more could one ask? Workers here *lose 80 per cent fewer work days* from sickness or accident, than do workers of the nation as a whole.

"The people of Wisconsin extend a most hearty welcome to you and to your business."

—Vernon W. Thomson
GOVERNOR

•

For further data, write to the Wisconsin Division of Industrial Development, Office of the Governor, Madison, Wisconsin.

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WISCONSIN NATURAL GAS CO. • WISCONSIN POWER AND LIGHT CO.
WISCONSIN PUBLIC SERVICE CORP.

NEW PRODUCTS

Two-Unit Printer Handles Big Plans for Aircraft

This contact printer, which can produce templates up to 30 ft. in length, is large enough and versatile enough to handle all the tooling plan reproduction requirements of an aircraft company. It was developed by the Miller-Trojan Co., Inc., Troy, Ohio, from an idea given to it by North American Aviation, Inc., Los Angeles.

The printer consists of two separate printing units flush-mounted end-to-end. These can be operated either separately or as a unit from one of two control panels. In operation, the plan to be duplicated is placed on the cast glass printing surface. Then the sensitized sheet is placed over the layout, and the lid is closed. A semiskilled worker then pushes a button, and the sheets are exposed to the light for an automatically timed period, which is usually about three minutes.



Every Plant Gets Its Own Plastic Greenhouse

The new plant covers at the right, with opaque front and rear panels and transparent sides, are designed to protect young plants and seedlings from harmful wind or light frost, and by turning an opaque side to the sunlight, to soften harmful rays.

At night, the covers retain heat built up in daytime. They also hold humidity, and have vents at the top. They are sufficiently durable to withstand rain and snow.

The covers, called Wigwarm protectors, come in several sizes for plants up to the size of chrysanthemums. They are manufactured by Aldon Products Co., Duncannon, Pa., and are sold as a kit.

Mail order prices start at 69¢ each postpaid.



NEW PRODUCT BRIEFS

Aluminum foil tape with silicone adhesive is being manufactured by Mystik Adhesive Products, Inc., Chicago, Ill. It is said to be the only tape of its type made with silicone adhesive, and can be used between —100F and 550F. Uses include aircraft, guided missiles, and appliances. A strip of 36 yd. of 1-in. tape costs $4.07.

•

A fountain pen oilcan that dispenses oil through a hollow needle makes it possible to reach spots inaccessible to regular oilcans. It operates with almost any oil, including crude, and is especially useful for oiling cameras, typewriters, fishing gear, precision gauges, and machinery. Called Lubristyl, it's distributed by Girdwood & Allen, Inc., New York, and retails from $1.69.

•

Wide-lapped bevel siding made by the Diamond Lumber Co., Portland, Ore., is a marriage of wood, plywood, paper, and chemicals. It has a solid wood core faced on each side with a layer of fir plywood. The smooth hard surface over the plywood is made of Crezon, a plastic resin carried in a paper sheet, and is easy to paint. The manufacturer claims its use will save up to $200 per house on construction costs.

•

An "easy-finder" world globe that makes it simple to spot small and diverse areas such as Ghana and Cambodia, or the North and South Poles, is being manufactured by Replogle Globes, Inc., Chicago, Ill. The globe—16 in. in diameter—is mounted so that it may be rotated 360 deg. in any direction. It's made of a high-impact plastic with an ink-proof washable surface. It has a retail price of $29.95.



TIME SQUARE of Beirut, gaudy with neon and teeming with trolleys, is the busy Burj Square. It was nightlife-center until recent move of Paris-like swank spots to seafront.

Beirut—

For ages past, Beirut has been a center of trade. It's even more so these days, now that Cairo is so unfriendly to foreigners, and U. S. business is moving in fast.

BEFORE THE DAWN of history, the ancient Phoenician merchant-sailors were known from one end of the Mediterranean to the other. Today, the capital of what was ancient Phoenicia—Beirut, Lebanon (pictures)—is still a center of world trade. And it is becoming the most important center of Middle East commerce, transportation, and tourism.

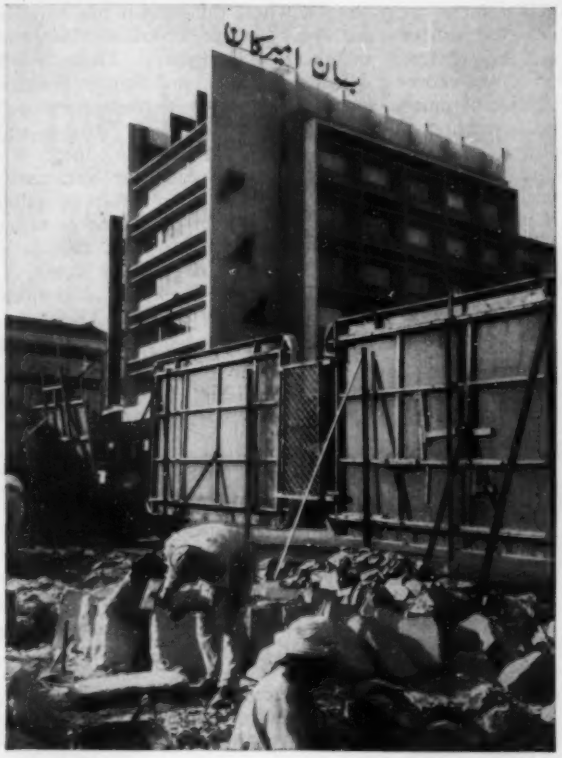
During the past few months the whole Middle East has rocked with military and political jolts, but Beirut has kept cool. Contrasted with its great rival Cairo, Beirut has become more rather than less secure. That's why foreign businessmen are flocking there to set up their Middle East headquarters and deserting the Egyptian capital, where Pres. Nasser has put the squeeze on both foreign and domestic capital. Of the 100 U. S. companies with branches or offices in Beirut, 32 established themselves there only last year.

• **Building Boom**—This influx of foreign operations—and capital—has meant a lot to Beirut. Although it's a city of only half a million people, last year the city fathers gave permission for construction of 850 buildings with a total of 2,500 floors. As it is, half of Beirut's buildings date back only to the past 20 years and the city already has a look of modernity unknown elsewhere in the Middle East—except for the Zionist urban developments in Israel.

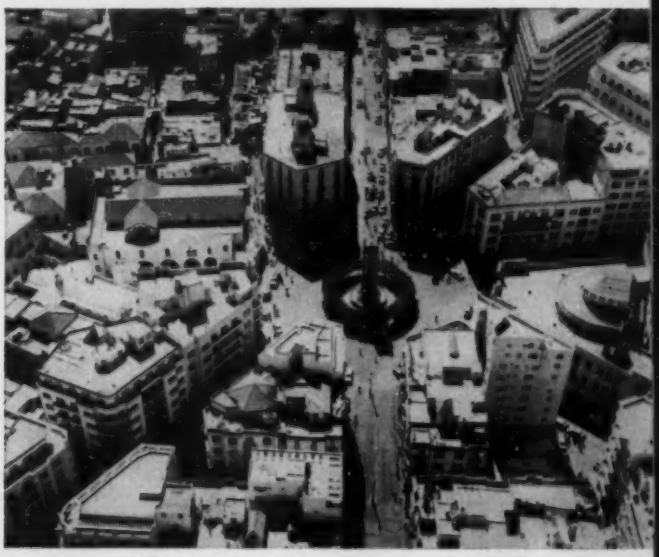
For the tourist, Beirut's attractions are varied, if not spectacular. Ocean bathing on the blue Mediterranean can be alternated with skiing in the mountains, just a few minutes away. The stark, mountainous countryside draws charm from famous cedar forests and ruins of ancient civilizations—remnants of a hundred conquerors who traveled east or west across the Fertile Crescent that connects Asia with the West. There's still a strong imprint from the last "conquest"—the French mandate that followed the fall of the Ottoman Empire in World War I. Beirut's risque night club acts and excellent restaurants give it claim to the title of Paris of the East.

• **Fans of U. S.**—Beirut is likely to get a tremendous fillip from the Eisenhower Doctrine—if and when its economic aid provisions get going. The pro-Western

A Middle East Oasis for the West



STONEMASONS imported from Syria hew by hand monument to late Lebanese Prime Minister Riad Solh.



INSPIRATION of Beirut's Place de l'Etoile, both in name and plan, was the Paris original. French influence is strong in city.



VEILED WOMEN crossing Parliament Street are, despite veils, in sophisticated attire by standards of Arab nations—again a Western touch.



SUCCESSOR to crafty Phoenician traders is the modern dealer in U. S. autos. Multilingual signs are common on Beirut's streets.

Story starts on page 130

Lebanese government has already come out wholeheartedly for the U.S. statement of policy and signed what amounts to a mutual aid pact with the U.S. (BW–Mar.30'57,p148). One thing the Lebanese hope to get out of the agreement is a wide-scale expansion of Beirut's International Airport, already the biggest and busiest in the area. (It handled almost half a million passengers in 1956.)

One important reason for Lebanon to throw in its lot with the U.S. on Middle Eastern policy is religion. Half of Lebanon's 1.5-million people are Christians. As such, they're not happy with the pan-Islamic aspects of recent Arab nationalism. The Lebanese are proud of the fact that they were Arab nationalists 50 years ago, long before Cairo street mobs heard of the movement. But for the Lebanese, nationalism has always meant the adaptation of Western democratic idealism to their own country. As the capital of secular culture in the Arab world, Beirut is proud of this heritage and leadership.



OPEN STALLS in vegetable market are a link with Beirut's picturesque past. The city is growing up fast, though, especially with the influx of foreign capital and businesses.



MODERN architecture is widespread; half Beirut's buildings are 20 years old or less, and city last year gave 850 new building permits. These fringe the blue Mediterranean.

• **Press Freedom**—Today, Lebanon is an enlightened republic; its head of state is a suave, 56-year-old Christian, Camille Chamoun. It's the only Arab country where the press is free to criticize the President, Prime Minister, and members of Parliament. There is hot debate on internal and foreign policies; in fact, the freedom is sometimes abused by proponents of foreign intrigues and subversions. To be sure, there has been censorship since the Suez crisis began. But that hasn't stopped rabid partisan attacks on politicians or bitter newspaper feuds between the little state's multitude of religious sects.

This political liberalism is coupled with economic liberalism. The Lebanese have a free exchange system, which in no small part is a result of the $22-million sent home annually to friends and relatives by the tens of thousands of Lebanese living abroad. These remittances—plus the inflow of capital from oil-rich but troubled Arab neighbors and the receipts from tourists—explain how Lebanon could afford to import $180-million worth of goods last year (with the U.S. as chief supplier) when exports were only a piddling $45-million.

• **Trading Folk**—The Lebanese literally have to live on trade. They have no natural resources. And the semi-arid climate makes farming, on pitiful mountain plots, a deficit industry. As a result, for centuries the Lebanese have been importers and exporters for the entire Middle East interior—including Syria, Palestine, and Jordan (BW–Sep.29'56,p85). Today, they're trying even harder to expand trade—and no wonder, with recent setbacks such as the creation of Israel, the growing hostility from the rabidly nationalist government of Syria, and the development of the Jordanian port of Aqaba on the troubled gulf of the same name.

At the same time that they hope to expand their airport, port facilities, and free trade zone, the Lebanese want to become more than just a transit point for shipments bound east or west. Through a drive, already begun, to establish secondary industries, they envision a future as assemblers of goods such as machinery destined for neighbors to the east. Textile and food canning industries have already developed, and employ half the present industrial force. Capital investment in the country has risen from $37-million in 1950 to $72-million in 1957. In the same period, industrial establishments have increased from 2,000 to 3,000. The industrial labor force has climbed from 15,500 to 24,000.

• **American Enterprise**—Among the newcomers to Lebanon are three U.S. banks—First National City and Chase Manhattan of New York and Califor-

Clarence Weldon, Division A

a meat packer's banker

On Clarence Weldon's desk, at The First National Bank of Chicago, there's an unusual paper-weight . . . a plump ear of corn.

It's a good business-symbol, for Mr. Weldon is vice president of Division A. He loans money to grain and feed men—and to meat-packers, whose interest in feeding and fattening is pointed.

Appraising a corn belt farm or a western ranch—judging the quality of steers in the feed-lots and stockyards—or inspecting a packing plant, he knows the signs that lead to sound transactions.

On his 230-acre farm near Rockford, Illinois he raises livestock—and watches the market from a personal standpoint.

Since Mr. Weldon's early days on the farm, since his studies at the University of Illinois in animal husbandry, his interest in all phases of agriculture has been active and lasting. His 31 years of agricultural credit experience at our bank have equipped him with an unusually rich background of knowledge which he places at the service of his customers.

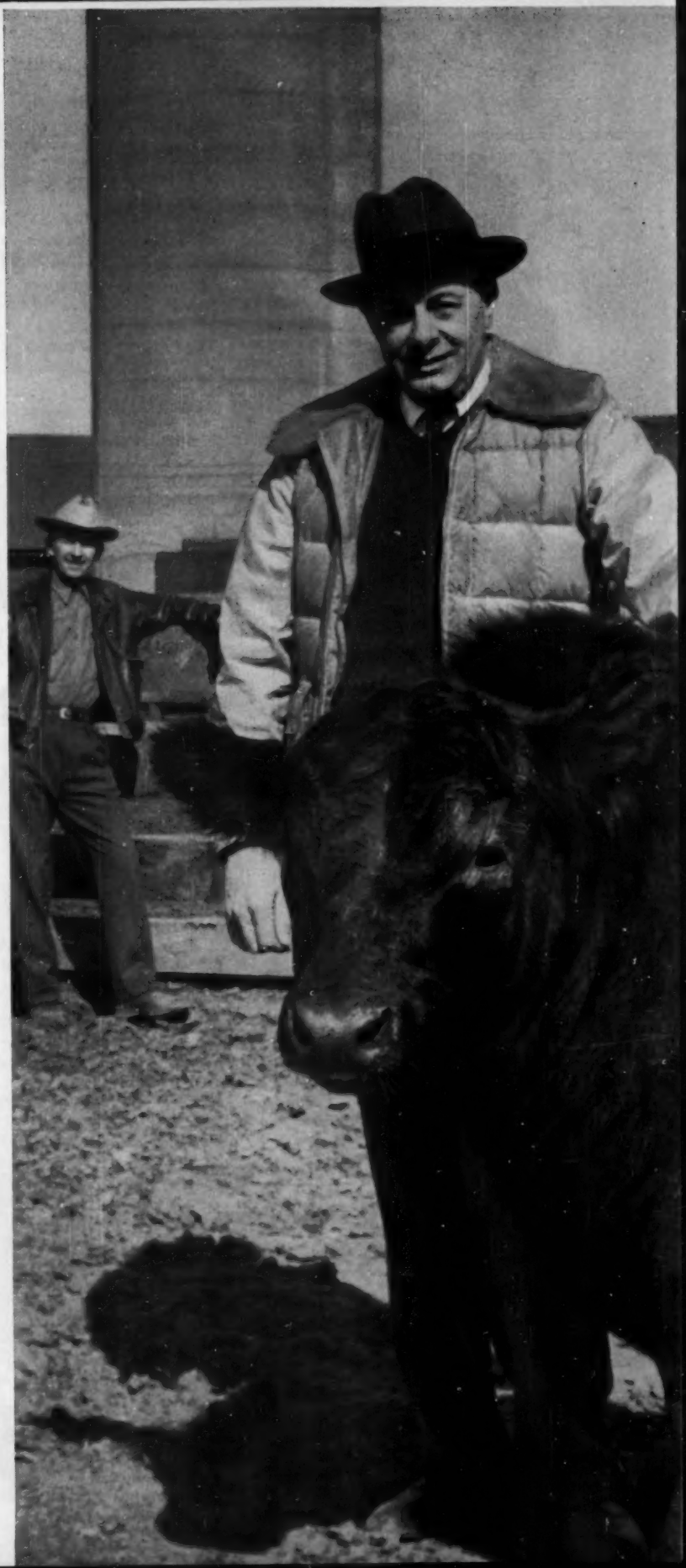
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nia's Bank of America, all of which arrived within the past 18 months. Other arrivals include the International Resources, Engineering & Exploration Group of Washington, now surveying the Damascus-Medina "Pilgrims" railway (BW—Aug.25'56,p157). Several international oil companies are also planning to move their Middle East regional distribution headquarters from Cairo to Beirut. American capital is behind three of the six new hotels rising along the Beirut seafront. Biggest of these is the Phoenicia, a $5-million addition to the worldwide network of Pan American World Airways' Intercontinental Hotel Corp. (BW—Nov.10'56,p105).



REOPENING of Suez, with first convoy since fall headed by Soviet freighter Krasnodar, raises many new questions—as old Suez Canal Co. ousted by Nasser adds a . . .

Footnote to Suez' Future

This week the fate of the Suez Canal hangs on discussions by statesmen in New York and Washington (page 147), and on what happens in the planning rooms of the international oil companies in New York, London, Paris, and Pittsburgh.

But an interesting side comment on the canal's role in future world trade—almost a voice from the grave—came from the old Universal Suez Canal Co. The Canal Co. ran the canal for almost a century before Egyptian Pres. Nasser grabbed it last fall.

• **What Might Have Been**—The Canal Co. released a study prepared for it by Ebasco Services, Inc.—a study that began early last year before the events at Suez took their most dramatic turn. Ebasco's job was to forecast traffic demands on the canal as far ahead as 1972. Its report—based on what might have been if Nasser hadn't put all canal traffic in jeopardy and accelerated the movement to use other methods of getting oil to market—makes some rather startling projections.

Here's what Ebasco's study indicated: Petroleum traffic in the canal would have expanded five times by 1972. Other merchandise traffic would have risen from 39-million tons annually to 54-million. The average size of loaded tankers would have gone from 18,900 tons to 32,100 tons, the total number of ships from about 15,000 in 1955 to almost 31,500 in 1972.

• **Modernization Need**—Handling of this expanded traffic, however, the Canal Co. pointed out in releasing the study, involved a great big "but." It would have required, the company said, considerable modification and expansion.

The Canal Co. argues that it had such plans already moving when Nasser's seizure took place. A $50-million program of modernization that was under way included the construction of a series of bypasses that would have permitted more two-way traffic. The program would also have provided a 44-foot channel from one end of the canal to the other.

The Canal Co. says it had still another modernization program projected—this one to have been completed before its lease expired in 1968. This would have provided for two-way traffic for two-thirds of the canal's length, and would have eliminated the hazard to navigation involved in the overhead railway bridge by construction of a tunnel. This program of modernization—which the Canal Co. says would have been its ninth—would also have made the canal by 1968 navigable by tankers up to 55,000 or 60,000 deadweight tons, and by vessels of 40-foot draft.

• **Wherewithal**—All this, the company says, would have cost a total of $287-million. It would have been paid for out of the steadily increasing revenues of the Canal Co. and the company says, "There would have been no thought of increasing the transit tolls." **END**

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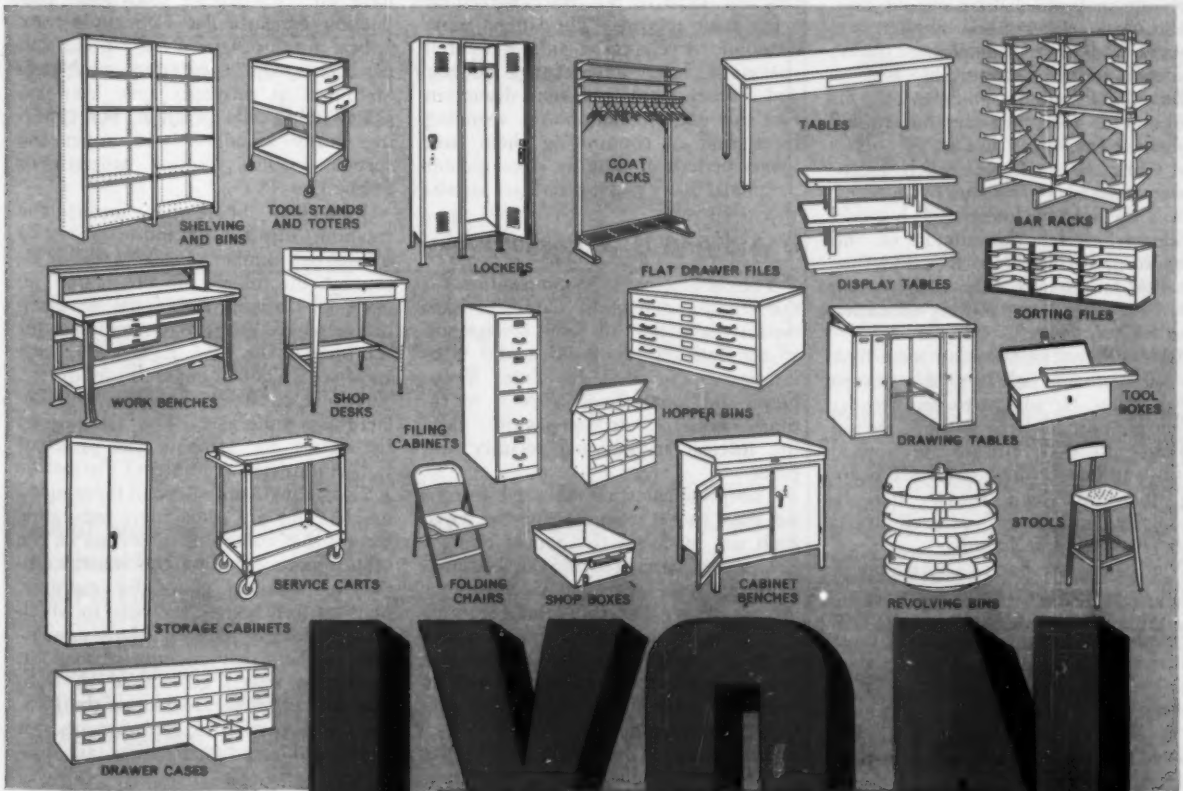
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What Foreign Aid Means to U. S.

● As Congress girds for hot fight, new studies bring out role of foreign aid in boosting U. S. exports, providing jobs at home, spurring private investment abroad.

● On defense side, foreign military aid means big direct savings to U. S., permits U. S. armed forces to get most modern weapons faster and at less cost.

● And despite labels put on program, almost all of aid is still primarily military, geared to U. S. security.

THE ANNUAL debate over foreign aid is set for an early start on Capitol Hill—and all signs point to a hotter fight this year than at any time since the aid program began in 1948.

The battle lines are already sharply and clearly drawn. Mustering for the attack are numerous economy-bent congressmen, eager to chop the Administration's record peacetime budget. They are casting a baleful eye on Pres. Eisenhower's $4.4-billion foreign aid request, and have made it their prime candidate for the chopping block.

But the President, in defending his budget last week, put the foreign aid request at the top of his list of outlays that Congress should not touch. Eisenhower recognized that he would have to lead the fight for foreign aid—because, as he said, it has the support of "no pressure group in the U.S.," and thus becomes fair game for the congressman who "suddenly becomes very economy-minded."

So the President then and there took the offensive on behalf of his foreign aid program. He sought to win broader public support for it by stressing its importance to U.S. citizens, in both a security and pocketbook sense—its meaning for "our own future markets, prosperity, and peace"—as well as its value to foreign recipients.

• **Marshaling the Facts**—This is a tough point to make clear. In 10 years of trying, supporters of foreign aid have never succeeded in making it seem to most Americans like much more than a give-away or a do-gooders' program—or in making its impact on U.S. business seem real or important. What has loomed largest has been what seemed to be its formidable cost.

Much of the difficulty in giving the American people a picture of the "mutual" nature of foreign aid stems from the technical complexities of explaining how the program works. To cut through these complexities and clear up the growing confusion about the purposes and achievements of foreign aid, both the Administration and the Senate have sought to marshal the facts in a series of studies on various aspects of the program. The Senate Foreign Relations Committee is publishing 21 such special studies and reports.

With the exception of the report of the President's Citizens Advisers Committee—which conservatively endorsed the main lines of the present program—most of the others agreed on a few basic reforms. They urged more economic development aid for neutral nations, a clearer separation of military and economic aid, and more discretion for the Administration in spending funds and in committing them over longer periods of time for development programs.

I. Aid and U. S. Pocketbooks

The studies made in preparation for the coming debate in Congress have thrown new light on how foreign aid affects both of the fundamental U.S. interests mentioned by Pres. Eisenhower—the pocketbook interest in future markets and prosperity, and the interest in national security and peace.

The principal study of what foreign aid does to the economy of the U.S. itself was made for the Senate Foreign Relations Committee by the National Planning Assn. On one side, it lines up the costs. On the other, it finds that foreign aid has a booster effect on U.S. exports, on jobs at home, on private investment abroad, as well as bringing some direct returns to the U.S. government.

• **The Bill**—According to NPA, the cost of the foreign aid program shapes up like this:

• Foreign aid expenditures have averaged about 1.8% of the gross national product over the past 10 years. Last year the ratio was 1.1%.

• The impact on the federal budget has been greater. Since the program began, aid has accounted for an average of 10.9% of federal expenditure; last year it was 6.4%.

• Elimination of foreign aid would theoretically permit a 3.5 percentage point reduction in personal income taxes at present income levels. But since the program is still largely military, savings on foreign aid would almost certainly be more than offset by increases in the U.S. defense budget.

• **Exports**—The major direct effect of foreign aid on the U.S. economy, the NPA study found, is in stimulating exports. Without foreign aid, governments that earn too few dollars selling to the U.S. market would be short of dollars to buy here, and would have to take their business elsewhere. Foreign aid gives them the dollar exchange they need to buy in the U.S. market.

Shipments under the aid program have accounted for an average of 32.5% of total U.S. exports since 1948. Last year they added up to roughly 20% of all exports. The chart on the opposite page shows how aid shipments have affected exports and total production of particular U.S. industries.

For surplus agricultural foods, aid has been a major export channel. Nearly $6-billion in surpluses have been exported under the program, not counting nearly $3-billion sold under the specific surplus disposal program of Public Law 480.

• **Jobs**—This boost has meant the creation, directly or indirectly, of a substantial number of jobs in the U.S. through the foreign aid program. The National Planning Assn. puts the number employed directly in producing for the program in 1955 at 356,000, with another 237,000 engaged indirectly. The bulk of these jobs were in manufacturing industries. The table gives the figures for some of the principal U.S. industries.

• **Long-Run Gains**—Beyond these measurable gains are some more intangible factors that come out in several of the other reports made for the Senate committee. Industry gains, for example, may last well beyond the years in which foreign aid was granted. Many new export markets may become permanent, as foreign buyers grow used to U.S. products and dependent upon the U.S. for spare parts and replacements for equipment purchased under aid programs.

These can be very important factors for the long haul. The British have held onto a big slice of the markets in their former colonial dependencies, largely because these countries were used to British equipment and conversion to other types was costly. One thing that alarms U.S. officials is the possibility

Economy and Defense

that the Russians may win a permanent foothold in free world markets and underdeveloped countries through their trade credits.

Foreign aid has also sparked an expansion of U.S. business abroad that goes beyond the export of goods directly financed by aid. The dollar exchange it provides helps to relieve foreign governments of the urge to impose discriminatory curbs on dollar imports, or to resort to cut-throat export subsidies to earn dollars. And the economic recovery and expansion stimulated abroad by U.S. aid and creates larger markets for U.S. goods; the big U.S. customers remain the more highly developed countries.

• **Special Cases**—Some other U.S. gains turned up in the studies are very tangible, though more limited in scope:

• Overseas sources of such strategic materials as nickel, lead, zinc, and tungsten have been developed directly or indirectly. This includes investment of about $250-million in dollars and local currencies in foreign strategic materials production, as well as long-term procurement programs.

These programs have some importance in view of increasing U.S. dependence on foreign sources of key raw materials.

• There have been some subsidy benefits for specific U.S. interests. Heavy shipments of surplus farm crops are the most obvious example, but aid has also been a major prop to U.S. shipping. By law, half of all aid shipments must be in U.S. bottoms. Nearly $1-billion has gone to U.S. flag vessels under the aid program since 1948; aid cargoes have made up 75% of the business of U.S. tramp vessels, 30% for other U.S. ships. Officials guess it was this business that kept the U.S. tramp fleet on the seas.

• **Investment**—Not least important is the relation of the aid program to private investment. The International Cooperation Administration encourages private U.S. investment abroad in two ways—through its investment guarantee program and through contributions of

How **Foreign Aid Effects** Some Major U.S. Industries

INDUSTRY	Aid Shipments, as Percent of Total Production	Aid Shipments, as Percent of Total Exports	Number of Jobs Created
Ordnance	9.4	21.3	13,100
Construction, Mining, Conveying Equipment	15.4	76.8	23,400
Engines and Turbines	3.0	22.0	3,200
Tractors	5.9	20.9	6,200
Aircraft Engines and Parts	8.8	70.3	72,900
Metal Working Machinery	1.0	20.9	4,700
Machine Tools	1.5	20.7	2,600
Electric Equipment	1.8	31.4	31,100
Generators and Motors	1.6	31.4	2,700
Industrial Machinery	1.3	20.1	26,800
Agricultural Machinery	1.8	16.5	2,400
Motor Vehicles	1.6	26.0	17,800
Other Transportation Equipment	1.6	59.0	3,900
Chemicals	1.3	17.8	16,100
Iron and Steel Products	0.6	17.7	66,400
Textile	0.8	18.5	13,300

Data: National Planning Association.

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A voice from the shelf... that says "Here's the paint ... drug ... oil ... you're looking for ..." would certainly help both buyer and seller. Attractively lithographed cans do "talk" this way, but one trouble has been high production runs of lithographed cans vs. the short run needs of variables such as color names, batch numbers and date codes. Markem suggested imprinting the variables on partially lithographed cans, as they are needed, and built the 70AF machine to do the job. Today a fair number are in use, imprinting little 1/32 to full gallon sizes, areas to 2" x 6", at rates up to 1500 an hour (an even faster rotary machine is underway). Beats torn, smudged or missing paper labels all hollow.



"Elephant trunk" marker ... is not the usual way Markem describes its machines, but for the 89A, the nickname has stuck. This is a typical Markem "Special Products" development, for marking tradename and size on tubular rubber insulation. The inelegant nickname originated because the material is a six foot length of gray tube 1¼" to 5" in diameter. It is fed into the machine, passes under the printing head and ejected by a lower drive roll. Adjustments for different diameters are easily made, and other useful features include mobility for use in different locations, variable speed motor, excellent imprint quality with Markem's jasmine yellow marking compound. The people who worked out this "Special" perhaps can help you, if you have a yet-unanswered problem in identification/decoration marking.



"Do-it yourself"... is often prompted by economy reasons. In marking products, however, the manufacturer who "does it himself" not only saves money, but also gets what he wants when he wants it. Here's what we mean: a company making plastic cases for eyeglass lens cleaner had the product name and directions imprinted on the containers by a job printer. The method was neither convenient or economical. The local Markem man presented a case for the 20A machine, and it gave a good account of itself in an 80-prints-per-minute run. Having another satisfied customer makes us happy, and he's tickled with the quality, convenience, and prospect of the 20A paying for itself in six months.



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capital to special industrial development banks and to commercial banks in various countries. To date ICA has insured $130-million worth of overseas investments by some 90 U.S. firms in 15 countries against expropriation, nonconvertibility, and in some cases war losses.

Roughly 150 private U.S. manufacturing and consulting firms, as well as universities and foundations, have received contracts for technical assistance abroad. About one-third of these have gone to private companies. The reports indicate that such contracts often open the way to investments or exports for the U.S. company.

• **Direct Returns**—There has also been some financial return to the U.S. government from the aid program, according to the new studies. Over $1-billion in local currency counterpart funds has been earmarked for U.S. government expenses abroad.

There has always been much confusion about how these counterpart funds work. Roughly, the story is this: U.S. dollars appropriated by Congress for economic aid are converted into letters of credit in U.S. banks. A foreign purchaser—once an agreement has been worked out between the U.S. and his government—draws on this letter of credit to pay his supplier, who might be either a U.S. manufacturer or exporter.

But the foreign purchaser must deposit local currency funds with his own government to cover the cost of the goods to be imported from the U.S. These local currency deposits are the "counterpart" funds. Foreign governments may use 90% or more with U.S. approval for their own national budgets, or for U.S. local costs.

II. Aid and Defense

Shipments of military items don't generate this direct return to the U.S. government in the form of a share in counterpart funds. Nevertheless, it's the military aid programs that provide by far the largest direct savings to the U.S. government.

This somewhat startling conclusion, which runs counter to the prevailing notion of foreign aid as a financial drain on the budget, comes out of the current foreign aid studies and continuing government appraisals, along with two other important conclusions on the relation of foreign aid to U.S. defense. These are:

• Foreign aid permits the U.S. armed forces to modernize their equipment faster than they could otherwise do without additional appropriations.

• A great part of the aid classed as economic plays a vital role in the U.S. defense picture, and the whole foreign aid program still is in reality mainly military.

• **Savings and Modernization**—The direct savings to the U.S. from the military aid program come about in this way: By financing the disposal to our allies of obsolescent equipment that is still useful for their defense, the foreign aid program makes more funds available to the U.S. military.

In recent years, officials estimate, as much as 50% by value of the weapons supplied to our allies were obsolescent in the sense that the U.S. armed services were glad to be able to "sell" them through the aid program and apply the proceeds to procure newer weapons. In the first few years of the military aid program, the ratio of obsolescent or surplus material may have been as high as 80% to 90%.

This has meant, according to the studies, a total saving to U.S. armed forces of more than $10-billion over the past seven years.

There's another aspect, too. Until late last year, the Defense Dept. set prices for surplus equipment on the basis of replacement cost rather than original cost or fair market value. According to the U.S. Comptroller General, this led to disposal of obsolescent weapons under the aid program at up to 170% of original cost. He estimated that charging on this basis added up to more than $1-billion in the course of the aid program.

Defense Dept. officials say this second-line equipment may be as useful or more useful to our allies in maintaining security or preparing against potential local wars as the ultra-modern weapons our armed forces get in exchange would be. But they reason that without this military aid program, the U.S. forces would either have to keep their old weapons longer or replace them at higher cost.

• **Substitutes**—It's extremely difficult to figure just what it would cost the U.S. to maintain the same level of military security if the foreign aid programs were abandoned. Since we don't yet have a true intercontinental bomber or missile, foreign bases—especially for aircraft and missiles—are irreplaceable, military experts say, and they will still mean considerable savings even when long-range bombers are available. U.S. alliances and aid have helped greatly in obtaining these bases.

But in an effort to put a figure on the extra cost of defense without foreign aid, Adm. Arthur W. Radford, chairman of the Joint Chiefs of Staff, has said that "it would cost four or five times as much to get, in terms of our own national interest, the increased security that we get in terms of these relationships."

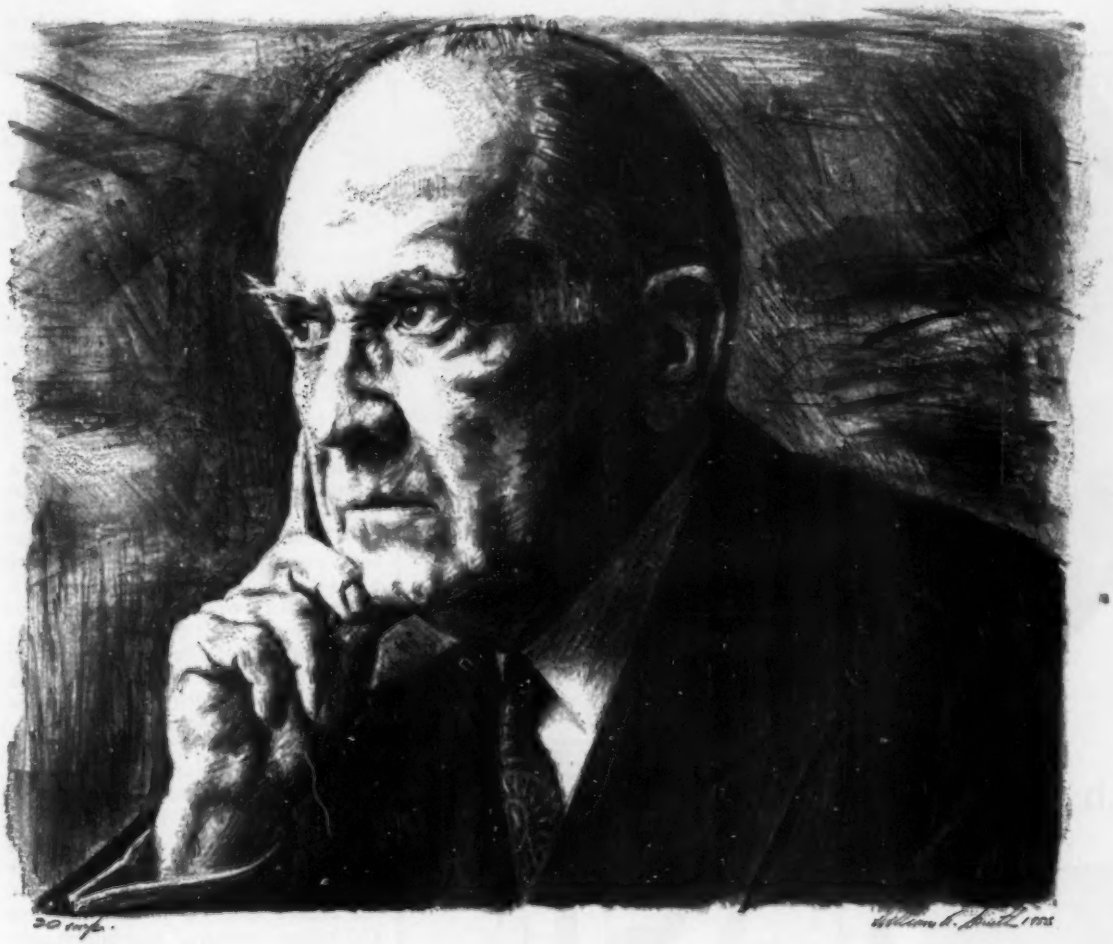
• **Military Emphasis**—In considering how military aid fits into U.S. defense, the new studies point out, you have to take into account more than the aid that's classified as military. Despite re-

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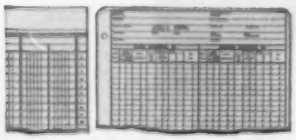
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cent emphasis on economic programs, the fact is that the foreign aid program still is mainly military.

The budget for the next fiscal year asks for $2.5-billion under the head of military aid, $1.9-billion for economic aid. But this conventional breakdown understates the heavy military proportion in foreign aid spending.

Since 1950 there has been considerable double talk in presenting aid requests to Congress. In the early days of NATO and Korea, as much aid as possible was labeled "military." With the thawing of the cold war, the fashion changed and large sums earmarked for financing armies of allies were included in "economic" aid.

• **Blurred Line**—Use of the vague term "defense support" aid—economic assistance to make a big defense effort possible—also blurs the distinction.

Most defense support aid goes to buy in the U. S. consumer commodities that are sold in the recipient countries, the proceeds going into the country's budget. This either covers military expenditures directly or finances economic development, thus making funds available for the military effort.

Some defense support money goes for items such as wool for uniforms or oil for tanks—largely for the armed forces but partly for the civilian economy, too. Some goes for dual purpose projects serving both military and civilian needs—highways, airfields, communications. Of the total $1-billion defense support obligations in fiscal 1956—last year for which there are complete figures—roughly $240-million was for such dual purpose projects.

• **True Breakdown**—But even if you count these projects as purely economic, only about half of defense support funds can be regarded as non-military. (Officials regard this 50-50 split in defense support aid as about correct.)

Apply this 50-50 economic-military ratio to the defense support part of economic aid, then add in military aid, and you get this breakdown of the $4.4-million foreign aid request for fiscal 1958—$3-billion military and $1.4-billion economic. In the current fiscal year ending June 30, the split has been $2.7-billion military, $1.1-billion economic.

Even that isn't the whole story, though. For the lion's share of so-called economic aid has gone to five military allies of the U. S. in Asia—Korea, Nationalist China, Vietnam, Pakistan, and Turkey—because of their strategic importance to the U. S. (In fiscal 1956 they got $813-million out of the $1.5-billion aid money not directly spent on weapons.) Experts figure that not more than $500-million goes into what can strictly be called economic development assistance. END



Unretouched photo of a corroded diesel engine bearing.

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Changing the Cut

Oil company eyebrows rise as Italy's state-owned outfit considers 30-70 split with Iran; 50-50 is usual.

The big international oil companies held their breath last week when they heard that ENI, Italy's state-owned oil company, would share profits with Iran on a 30-70 basis in a new Iranian oil venture. Traditionally, oil companies and oil-rich countries use a 50-50 formula on splitting up earnings. ENI's new deal could set off a chain reaction of negotiations by oil-producing countries for a larger share of oil profits.

Actually, ENI's move last week was just one more maneuver in its fight with private oil companies. Last January, Gulf Italia Co., a Gulf Oil subsidiary, shifted its oil work from the mainland to Sicily primarily because of a new law, backed by ENI, that would put oil company profits on a 40-60 basis. Private companies are still fighting for a more favorable oil law.

Observers interpret ENI's latest move in Iran this way: By talking up a 30-70 deal in Iran, ENI is indirectly taking another swipe at oil companies that would like better treatment in Italy. When all the papers are signed—according to inside reports—the ENI-Iran agreement will probably stick closely to the usual 50-50 formula.

• **Criticism**—In any case, ENI is branching out—mostly because of the driving ambitions of Enrico Mattei, ENI's boss. Critics claim that despite laws favoring it, ENI hasn't even done an adequate job in Italy. Yet Mattei has oil tie-ins with Egypt (where ENI has done work for Pres. Nasser), Spain, and Somaliland—and is looking into Moroccan oil production.

Now, together with the National Iranian Oil Co., AGIP Mineraria (an ENI subsidiary) has set up a company in Iran called Sirib Inc. NIO will own 49%, nominate Sirib's chairman. AGIP will hold 51% controlling interest, name the director general—and, in effect, run operations. The new company has concessions totaling 14,500 sq. mi.—the largest at Qum near Teheran.

At present, the agreement—personally negotiated by Mattei—calls for AGIP to invest some $20-million in exploration over a 12-year period. With so small an investment, the new company will hardly be a match for the huge oil consortium that now dominates Iran's oil picture. But it's significant that AGIP, an independent "outsider," may get a firm place beside the major oil companies—and, contrary to the consortium, share ownership with Iran. END

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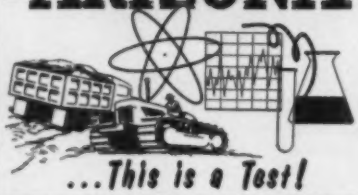
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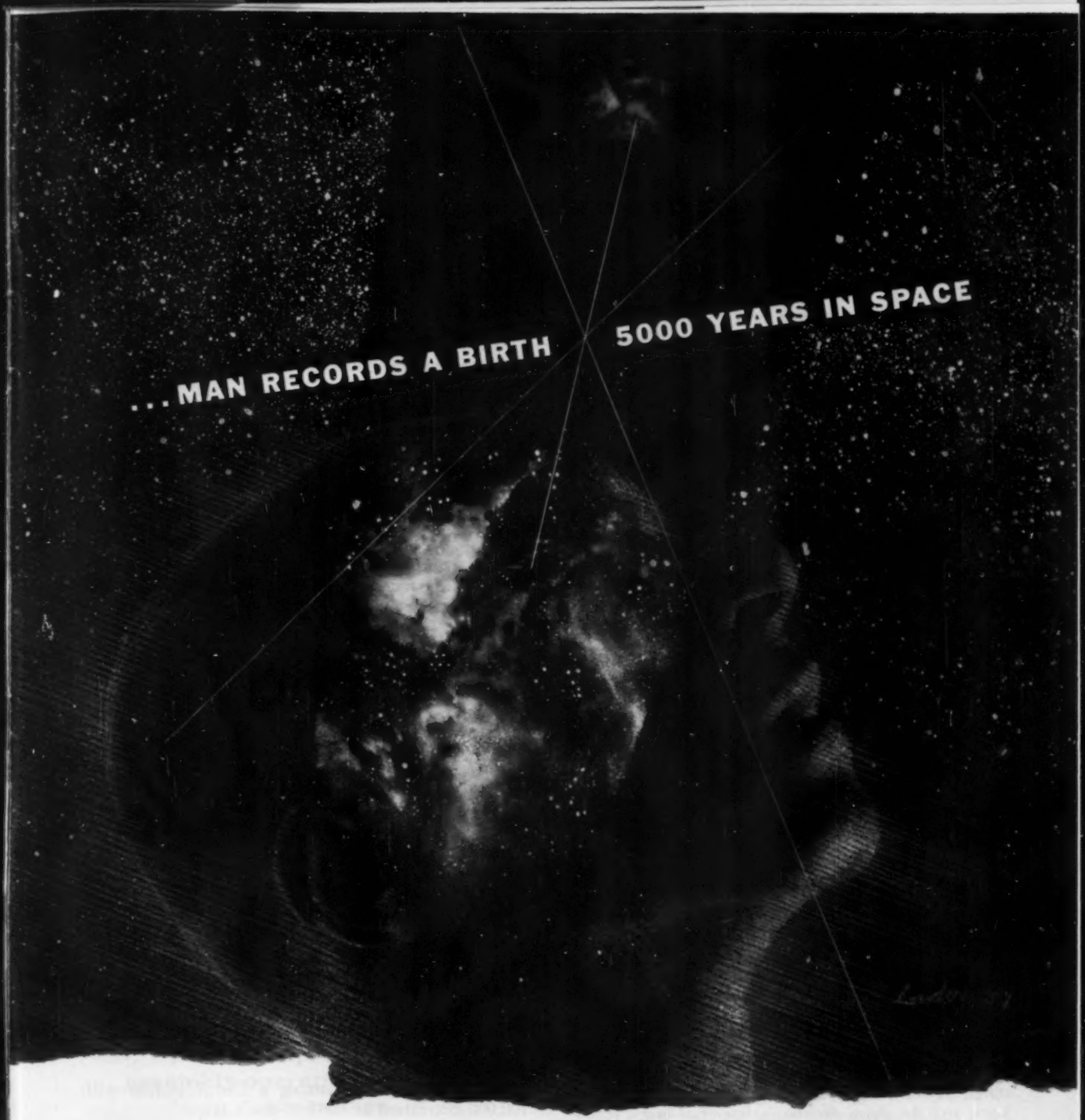
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In Business Abroad

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Brazil's Wood-Burning Railroad Dieselizes; Finds Job for Its Wood

In Brazil, the government runs virtually all the railroads—and often uses railroad jobs as payoffs to political supporters. One exception is Sao Paulo's Cia. Paulista de Estradasde Ferro, notable for being a private line and fueling its engines with wood from forests it owns. It's also notable, in Brazil, as a well-run railroad that reaches out into the rich coffee lands west of Sao Paulo.

Now the Paulista—thanks to the rising cost of wood—is dieselizing. This week the road got a $12.8-million loan from the Export-Import Bank for buying 38 diesel-electric engines, new rail, and up-to-date electric control equipment.

But the road isn't letting its 23-million eucalyptus trees go to waste, now that diesels are replacing wood-burners. It has teamed up with W. R. Grace & Co. to form a $20-million cellulose and paper company. A big operator in many South American countries, a newcomer to Brazil with recent investments in chemicals, plastics, and permanent magnets (BW—Nov.24'56,p164), Grace will put up 90% of the money for the new company. But most of the wood for papermaking will come from some 5.5-million trees the Paulista has parceled off as its 10% share.

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Canada's Worried Lumber Industry Eyes Its Old Markets in China

Before World War II, British Columbia's lumber industry was selling from 200-million to 300-million ft. of Canadian lumber to China each year. That market went out the door when the Communists took over China. Now, with lumber the softest spot in Canada's boom economy, the West Coast industry is talking about getting the embargo lifted and selling again to China.

Behind the industry's cry for help are all sorts of factors: a slump in sales to Britain, which now gets big lumber shipments from Sweden, Russia, and the Baltic states; skyrocketing ocean freight rates, aggravated by Suez; and the sharp decline in homebuilding starts.

As one lumber broker described the Chinese market last week: "It's the only fresh possibility left."

• • •

Argentina Grabs One More Plant Of American & Foreign Power Co.

It looked like the old Peron days when the Argentine government last week suddenly expropriated a power plant owned by American & Foreign Power Co.

Foreign Power is pretty well accustomed to seeing its Argentinian properties grabbed away: Between 1943 and 1950, Peron's regime walked off with over half of the company's $117-million investment in power facilities.

But since Pres. Aramburu took over in late 1955, Foreign Power's relations with the government have been improving. There have been serious talks about compensation for Peron's expropriations.

In fact, Foreign Power recently proposed a double-barreled plan. The company would (1) reinvest all the compensation for expropriated properties in a new power project for Buenos Aires and (2) help get some $89-million worth of additional financing for the project in the U.S. Altogether, the project would cost roughly $150-million, eventually add 900,000 kw. to Buenos Aires' power-short grid—and, incidentally, make Foreign Power, now operating mostly in the provinces, a major utility in the capital city.

Despite Buenos Aires' power blackouts and the country's own near-bankruptcy, the government said no to Foreign Power's proposal. Then, with last week's expropriation of a small, 600-kw. power plant—the first such move in many years—the government made Foreign Power doubly unhappy.

Coming atop the rejection of ex-Finance Minister Verrier's "austerity program," which would have opened the door a crack wider for U.S. and foreign investors, this latest government move looked like another major concession to Argentina's nationalists.

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Business Abroad Briefs

Britain's engineering strike—with a million workers idled—is jolting the aircraft industry. Bristol, for one, is pushing back delivery dates on its Britannias—and many companies fear a drop in new orders.

Ever estimate the power of a woman? In West Germany—say the latest figures—600,000 out of a total 3.3-million employers are women. Of these, some 125,000 head manufacturing companies. Many are widows who took over from husbands killed in the war.

Hertz Corp., biggest U.S. car renter with a network of outlets abroad, has purchased controlling interest in Europcars, S. A., a rental service that operates throughout France and North Africa, and has headquarters in Paris.

Readers Digest is planning a Dutch edition—with 100,000 circulation as the first year's target.

In Mexico, du Pont will build a $2.8-million plant in the state of Veracruz for production of titanium dioxide pigment. . . . **Dow Chemical Co.** has bought a 50% interest in Sales y Alcalis, S. A., a Mexican company that owns large salt properties on the Tehauntepec isthmus.

In politically stormy Cuba, Moa Bay Mining Co., wholly owned subsidiary of Freeport Sulphur Co., is investing around $75-million in cobalt and nickel production for delivery to the U.S. government's strategic metals stockpile. Most of the money will go for a processing plant in Oriente Province—where rebel Fidel Castro (BW—Mar.23'56,p151) holds out.

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One of many toy assembly operations performed by Multipress at Lionel Corporation

Ending rejects for Lionel

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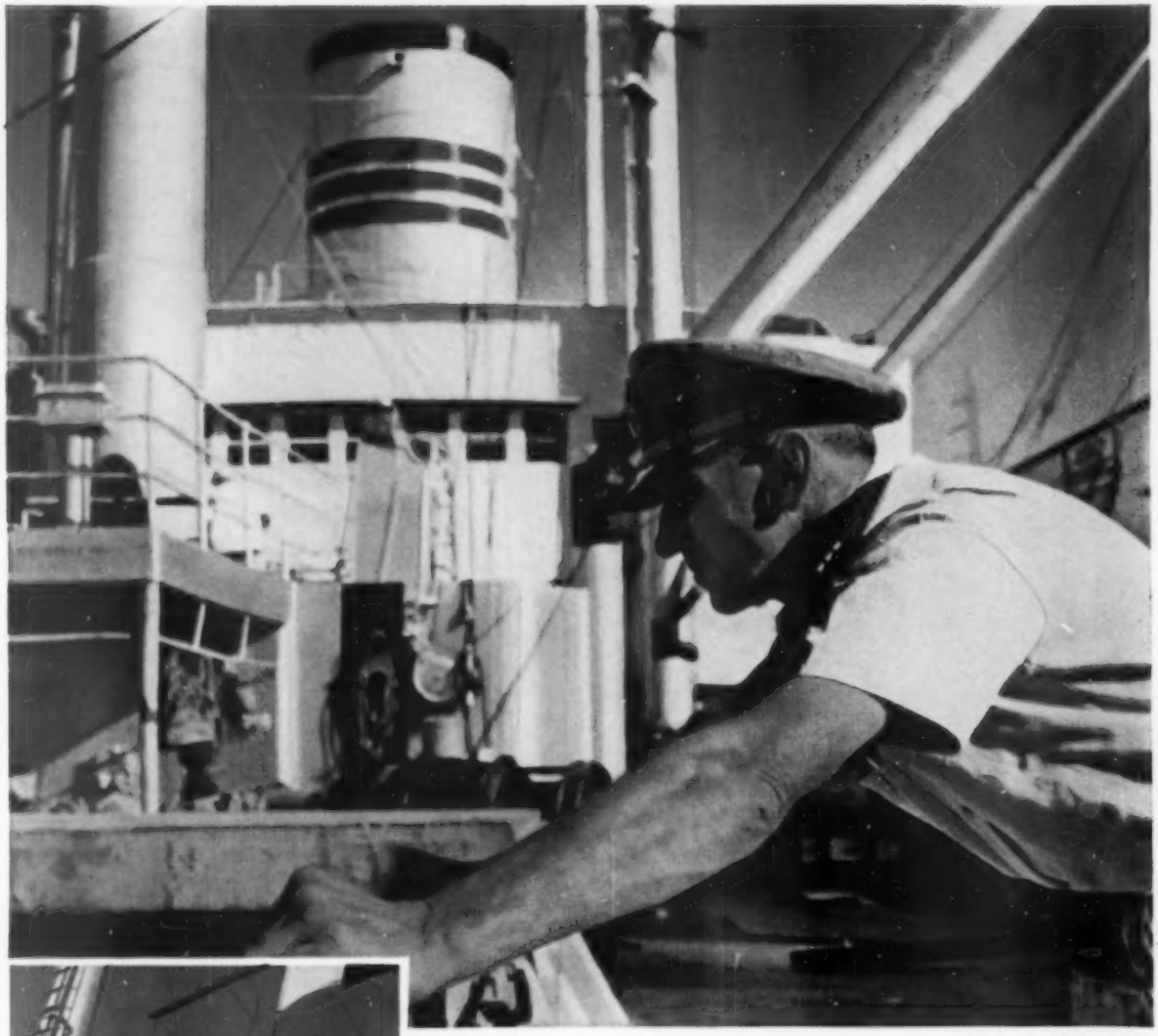
Multipress replaced positive mechanical presses which, because of fixed stroke, variations in parts dimensions, and shock, made scrap losses excessive. With Multipress, the ram stroke adapts itself automatically to variations in thickness, delivers only the preset maximum pressure. Fractured parts or loose assemblies are avoided.

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Photographs by Fritz Henle



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INTERNATIONAL OUTLOOK

BUSINESS WEEK
APR. 6, 1957



There will be a big shakeup in the Soviet economy, if Communist Party boss Nikita Khrushchev has his way (page 48).

Khrushchev is spearheading a new drive to decentralize industrial control and management, clear out the bureaucratic waste. He wants to scrap the industrial ministries in Moscow and shift their functions to regional bodies.

In effect, this would be a form of economic de-Stalinization. But Khrushchev clearly doesn't mean to loosen Moscow's political control. On the contrary, there are signs that he plans to tighten it. The new scheme may be designed in part to shore up the position of the party—and of Khrushchev himself.

The reorganization plan undoubtedly is a huge gamble. If it doesn't produce economic results within a reasonable time, it could easily lead to Khrushchev's downfall, assuming he survives the reorganization process.

—•—

This week some 1.7-million British workers went back to their jobs in the shipbuilding and engineering industries. Union leaders will now await the findings of a court of inquiry set up by the Minister of Labor.

It looks as if the unions will win this round, as they have won several rounds in the past. Wage increases in shipbuilding will come to at least 5% and in engineering to at least 3½%. And the unions aren't giving much ground to employers' demands that the increases be tied to guarantees against restrictive union practices.

For the British economy the settlement is sure to mean more inflationary pressure—and a weaker competitive position in world markets. Despite the encouraging recovery of British trade in 1956, the Macmillan government must find ways to offset this wage inflation. Otherwise, the pound sterling will certainly weaken again. A severe test for sterling will come in the fall, when seasonal pressures on the pound are at their strongest.

Meanwhile, a deep political crisis is brewing in Britain. The Tory Party is in danger of falling apart, leaving the conservative elements of the nation almost powerless—and Labor in political control for years.

When Lord Salisbury resigned last week Macmillan suffered a cruel blow. Salisbury carries enormous weight in the Tory Party and in the remains of Britain's feudal "establishment." **But Salisbury and many other influential Tories feel that the postwar Conservative governments have constantly retreated on all fronts**—giving way at home to the welfare state, and abroad to the U. S. The last straw that touched off his resignation was Macmillan's decision to release Archbishop Makarios, the Greek Cypriot leader.

—•—

Egyptian Pres. Nasser is winning a victory on the Suez Canal. Neither the Western capitals nor the maritime users of the canal will have any real say in how the Egyptians run the canal from here on out.

Little or no headway has been made in giving the United Nations a new role in controlling Arab-Israeli hostility. Egyptian administration has been reestablished in the Gaza Strip. The United Nations Emergency Force has been reduced to little more than the duties of the unsuccessful 1949 Armistice Control Commission.

If Nasser resumes raids on Israel from the Gaza Strip or shoots at Israeli shipping in the Gulf of Aqaba, the fat again will be in the fire.

Washington would then have to reappraise U.S. policy toward the Middle East—in spite of the early success of the Eisenhower Doctrine.

—•—

Almost complete returns from India's drawn-out election—the second in its history—show surprising gains by the Communists.

Prime Minister Nehru's Congress Party still retains the vast majority of the seats in the federal parliament and in the state legislatures. **But the Communists have increased their representation** in New Delhi from 17 to 25 seats. They have captured the government of the populous state of Kerala, the area of India with the highest literacy rate. And they have pushed the democratic Socialists into a poor third place.

All this means—in the words of the Times of India—that "an illusion has been shattered." As the Times sees things, Nehru's policy of cultivating friendship with the Communist bloc and pushing internal economic development has failed to pay the political dividends he expected.

—•—

The visit of a U.S. trade delegation in India—which held 500 separate consultations with Indian businessmen—points toward increasing American investment. As a result of the trip, according to one estimate, $105-million of U.S. capital will go into carbon black, aluminum, pharmaceuticals, and machinery manufacturing.

Meanwhile, India's Industrial Credit & Investment Corp.—in which the Rockefellers, Westinghouse, Olin Mathieson, and the Bank of America hold a 10% interest—plans investments in two new Indo-American enterprises: a polystyrene plant in which Dow Chemical Co. is interested, and a dyestuffs plant in which Sterling Drugs has a 10% stake.

—•—

The American balance of payments is reaching really big figures. According to the latest Commerce Dept. report, U.S. disbursements in 1956 totaled $25.5-billion—an increase of $3.6-billion over 1955. Total foreign disbursements in the U.S. last year were $24.5-billion—an increase of $3.8-billion.

One of the big changes in 1956 was a tremendous spurt in U.S. private investment abroad. There was a net outflow of $2.7-billion in private funds, a new record that's more than double the 1955 figure. (Commerce Dept. estimates that the net outflow this year will run almost as high.)

Last year, there was also a big increase in U.S. exports, which pushed up the other side of our trade ledger. The total (excluding transfers of military goods) was $17.3-billion, or $3-billion more than 1955.

A breakdown of 1956 exports—by category and destination—reveals these interesting facts:

Agricultural exports rose by 30%, with wheat and flour gaining 66%; cotton 50%; vegetable fats and oils 33%.

Exports of non-farm products rose by 16%, with coal and steel up 50%; construction, excavating and mining equipment 50%; other industrial machinery 20%; iron and steel mill products 20%, and chemical products 15%.

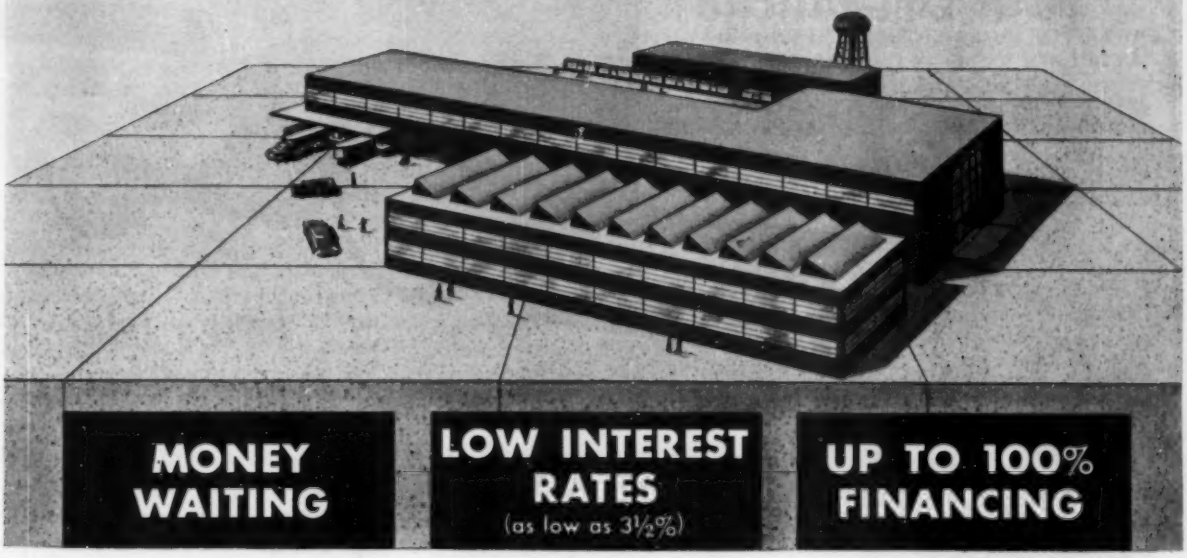
As for the markets, Western Europe, Canada, and the Far East took 20% more of our goods. Latin America, the Near East, and Africa took 10% more.

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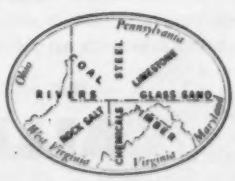
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Important controls are right where an operator would like to have them. Gauges are in plain sight, easy to read. Floor is clear, operator steps on or off either side.



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"Finest truck from a mechanic's point of view," is the comment of the lift truck fleet serviceman at a midwestern plant. "In over 3,000 hours of operation, the Allis-Chalmers truck has caused no trouble at all."

It takes only 22 seconds to strip an Allis-Chalmers fork truck for servicing—only 22 minutes for two men to disassemble right down to the bare frame.



PRESIDENT:

"Would like you to know how well satisfied we are," writes the president of an eastern warehousing company. Operating up and down a steep ramp had caused exceptionally heavy clutch repair costs with older trucks, but "we have yet to experience our first clutch trouble with an Allis-Chalmers truck."

Allis-Chalmers fork lift trucks were the first with optional torque converter drive — which eliminates clutch problems, saves shifting, provides torque to handle steep grades with ease.

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In Washington

• • •

Administration Asks Constitutional Rules For Replacing a Disabled President

The Eisenhower Administration this week asked Congress for an "atomic age" constitutional amendment to establish basic rules for replacing a disabled President.

Atty. Gen. Herbert Brownell, Jr., outlined to the House Judiciary Committee an amendment that would:

• Allow a President to declare his own inability and delegate Presidential "powers and duties"—but not the Presidency itself—to the Vice-President.

• Authorize the Vice-President, with the written consent of a majority of the Cabinet, to take over the powers and duties of the President, if the chief executive is unable or unwilling to declare his own inability.

In either case, the President could reassume his powers and duties by a mere written declaration that the inability had passed.

Brownell pointedly did not relate his proposal to Pres. Eisenhower's medical misfortunes—heart attack and surgery for ileitis. Instead, he stressed the "realities of the atomic age" and the peril to orderly government if the President could not act in a crisis.

In Congress, the outlook is for a lively constitutional debate, and nothing more. In both parties, there's a strongly held view that the legislative and judicial branches should share in any disability decision. An even bigger block of congressmen joins Speaker Sam Rayburn in doubting that there is need for any change at all.

• • •

Nationwide Research Drive Opens On "Stroke"—Third Worst Killer

The paralytic "stroke" kills an estimated 175,000 Americans every year, more than any other malady except heart disease and cancer, which are already being attacked on a gigantic research scale.

This week the National Institutes of Health announced that 10 medical centers had agreed to coordinate research on the stroke—more properly called cerebral vascular disease. It is hoped that 25 or 30 more centers will join the nationwide drive, expected to last five or six years. Federal grants of $400,000 a year to institutions and individual scientists are contemplated.

• • •

Dwindling of Housing Starts Brings Assorted Official Reactions

The slump in housing starts brought worried reaction on three official fronts in Washington this week.

• Housing Administrator Albert Cole shaved his estimate of 1957 starts from 1.1-million down to a dubious 1-million, after the House refused to raise the interest rate on GI loans (BW—Mar.30'57,p153).

• The Administration cut down payments on FHA-insured loans to the legal minimum—5% on the first $9,000, 25% on the rest.

• The Housing subcommittee of the House Banking & Currency Committee cleared legislation to: (1) add $1,650-million to the Federal National Mortgage Assn. authority to buy GI and FHA loans, (2) give veterans preferential status for FHA insured loans via lower down payments and waiver of insurance premiums, and (3) authorize a $1-billion investment in these preferential FHA loans from the funds of the World War II National Service Life Insurance.

Members of the subcommittee think Congress will go for the package, which in effect creates a new GI housing program under FHA. But there's one worry: The insurance fund is used for general expenses of the government, and a Presidential veto has been threatened against any diversion of the funds from the Treasury.

• • •

Hopes for High Dam at Hells Canyon Killed as High Court Spurns Appeal

For all practical purposes, the Supreme Court this week wrote finis to the hopes of public power advocates for federal construction of a high dam at Hells Canyon, in the Pacific Northwest.

The court refused to accept an appeal, thus in effect affirming the 1955 license given by the Federal Power Commission to Idaho Power Co. for construction of a series of three low dams (at Hells Canyon and two other sites) in the Snake River on the Idaho-Oregon border.

The National Hells Canyon Assn., advocating the high dam, clings to one tiny hope: action in Congress. But the legislation, introduced perennially, has virtually no chance of passing.

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New Move for U. S. Health Insurance A Pale Reflection of One That Failed

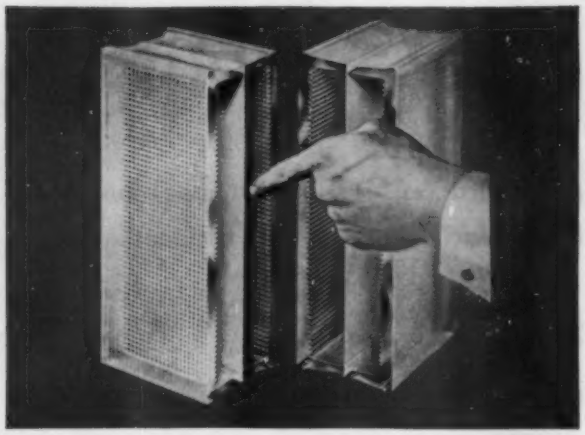
The Administration, whose attempt to provide medical health insurance for anybody who wants it was slapped down by Congress, has come up with a rather pallid substitute.

Marion E. Folsom, Health, Education & Welfare Secretary, is backing a bill to exempt small companies and non-profit groups (such as Blue Cross) from anti-trust liability if they combine to develop and promote medical health insurance. The idea would be to license such pools if they would provide wider and cheaper protection—especially against the costs of major illness—for older persons, farmers, the self-employed, workers in small plants, and persons rated as "substandard risks." Coverage for catastrophic illness is not generally available to these groups.

This program is far more modest than the earlier one, in which the government would have "reinsured" risks of private carriers in greatly broadened coverage.



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LABOR

Preview of 1958 Bargaining

UAW convention will provide a closer look at the demands the auto union will press in 1958 and give an inkling of its tactics.

FOR MANY YEARS, conventions of the United Auto Workers were hot-tempered, brawling affairs. Once Walter Reuther won a firm grip on the union's reins, most of the old contentiousness faded. Nevertheless, UAW conclaves have never lost their importance.

• **Significance**—The auto union's biennial convention in Atlantic City next week will be watched as closely by management and government as earlier ones have been. There are a number of reasons, but two are especially important now:

• Although major collective bargaining in the auto industry won't begin for a year, UAW will open its 1958 campaign against the big companies at the convention. Historically, such sessions give leaders a "mandate" for the next round of negotiations, and the strategy and tactics to be used are roughed out. Management will be following the proceedings closely both for a better idea of what the union will press for in 1958—and how it will go about getting it.

• The UAW convention is the first for any union since the Senate investigation of racketeering in labor spotlighted extensive wrongdoing in the International Brotherhood of Teamsters. As leader of the former CIO bloc in AFL-CIO, Reuther is expected to take an uncompromising stand against Dave Beck and the IBT, warn other evildoers to get out of the federation—or else—and otherwise call for strengthening of ethical standards in the merged labor movement.

Reuther not long ago advised the auto union that UAW delegates would draft preliminary plans for a 1958 drive for the "biggest wage increase in the history of the union." He added that the union must start getting "in a position to strike for the benefits we are entitled to."

He, together with the UAW international executive board, also announced a plan two weeks ago to (1) assure members more internal democracy, and (2) establish "a public watchdog [board] in our union to strengthen our efforts . . . to conduct the affairs of the UAW in accordance with the high ethical and moral standards for which the UAW has stood."

Under this plan, a board of seven "outstanding public citizens" other than professional labor mediators or arbitrators would be empowered to initiate investigations into charges of violations of internal union democracy or ethical standards of any level of UAW—from the top down. Reuther told the auto union that there is "no loophole in this thing—this is not just windowdressing."

For management generally, all this will be interesting—but more significant will be the preludes to 1958 bargaining. What is said and done will create the ground rules on which the issues of 1958 will be debated.



UAW head Walter Reuther will preside at the union's biennial convention opening in Atlantic City next week. Two major items will be discussed: economics and ethics.

I. The Issues

Auto management, accustomed to UAW's habit of trying to establish "principles," already is wondering if a pay increase is UAW's only goal for 1958.

• **Wages, Hours**—Employers would like to know, for instance, how the pay increase demand is tied to the short

". . . the primary purpose of the UAW meeting opening April 7 in Atlantic City is to decide how to achieve the union's 1958 objectives . . ."

UAW CONVENTION starts on p. 153

work week that UAW has mentioned as a possible demand for 1958. If UAW asks 40 hours pay for, say, 36 hours work, one auto man points out that the union is really asking for a 10% pay increase. Or, in asking for 40 hours pay for 36 hours work, is the union really seeking even more pay through overtime to be paid after 36 hours? Up to now, UAW officials have admitted only that the union will ask for more money than ever before. They add that UAW members have insisted that the union ask for a record boost—noting that auto workers, once among the highest paid industrial workers, now rank about 10th.

• **Extension of SUB**—UAW has made no secret, either, of another demand. Ever since the hectic morning in June, 1955, when Reuther and Ford Vice-Pres. John Bugas announced their supplemental unemployment benefits plan, UAW spokesmen have said flatly that greater benefits will be a goal in 1958.

Here again, such statements seem to presage a straightforward demand to raise SUBenefits from their present 60%-65% of take home pay and to increase the duration from the present maximum of 26 weeks. But it isn't necessarily that simple.

In the two years since the contract signing, UAW economic researchers have done quite a bit of talking about eligibility requirements for SUB and for unemployment compensation benefits. If a way could be found—and some UAW people believe it can—to relax eligibility requirements, that would be another method of increasing the benefits. More benefits, too, would flow if plans like the SUB-severance scheme recently adopted in Toledo (BW—Mar. 30'57,p156) were instituted.

By the time bargainers put their feet under a table in the spring of 1958, SUB trust funds will be near maximum size—giving the union great flexibility in asking for greater benefits.

During the convention (and during bargaining in 1958) there will be a lot of talk about pensions, and other fringe benefits, and new principles such as expenses for hourly workers who choose to move when their plant or work is relocated. Auto management generally does not expect too much difficulty in handling these. But there is one fringe demand that—in the opinion of at least one top industrial relations man—could provoke a strike.

• **Health Benefits**—This is a demand for non-contributory employer-financed health benefits. Auto companies now pay part of the health insurance cost for their workers. UAW planners think they should pay all and 1958 may be the year when they get serious about it.

II. Advance Preparations

Those are the major issues, as auto management presently sees them. The primary purpose of the UAW meeting in Atlantic City is to decide how to achieve the union's 1958 objectives.

This is more true this year than it was in 1955. The convention then was held just prior to the start of negotiations. UAW strategy actually had been formulated long before. As far as UAW strategists are concerned, the 1957 convention is timed just about right—it gives a full year for the softening up operations.

At the convention, two major items of preparation for the 1958 negotiations will share the spotlight. But UAW leadership is not certain to win either of them. The issues are constitutional changes to permit separate voting of skilled workers within bargaining units and on ratification of the contract, and a proposal to increase monthly dues by 50¢ to $3.

• **Privileged Status**—The move to give skilled workers a privileged status within UAW stems from the skilled trades "revolt" of 1955 when the artisans, more intent on cash than on security, staged protest strikes after UAW and the companies had come to terms on SUB. Now, UAW proposes to give the skilled people more of a voice in making the contract, and, in effect, veto power over the entire deal (BW—Dec.22'56,p84). This would give UAW a whip-saw over management that it had in only a smaller size two years ago.

But it's by no means certain that production workers who for many years have formed the backbone of the union will accept such a change, at least not without opposition and grumbling.

• **Dues Proposal**—It is even less certain that the union's administration will get the dues increase it seeks. UAW membership historically takes a dim view on dues increases—even though it now pays a lower rate to the international than members of many other unions. It may be even more stubbornly opposed to higher dues this year in view of the disclosures of irregularities in Teamsters fund handling.

One segment of opposition to the proposed 50¢ increase is led by Carl Stellato, president of Ford Local 600 with about 40,000 members. Stellato doesn't believe normal union expenses warrant a raise. However, if a raise is voted, he argues, it should be earmarked strictly to build a strike fund of $100-million. Stellato thinks an increase of $1 would do what he wants. For years he has been arguing that during a strike all strikers should get equal weekly benefit payments, as a "matter of right." UAW's present practice is to pay strike benefits on a basis of need.

Any dues increase would be split between the international and the locals. The international claims it needs additional funds to maintain its services and to expand them in areas where need exists—such as for starting a propaganda campaign for its 1958 bargaining objectives.

• **Administrative Changes**—Already the international has made some internal changes to clear the decks for such a campaign. Nat Weinberg, the union's able economist who built much of the UAW presentation on a guaranteed annual wage in 1955, has given up his post as director of the Research Dept. to become director of a new "Special Projects Dept."

Actually, Weinberg will be freed of all administrative duties to concentrate on basic plans for economic arguments in many fields and to consult even more closely with Reuther than he has done in the past. Weinberg's successor as head of the Research Dept. is Woodrow Ginsburg, who had the same position with the United Rubber Workers.

There will be more internal changes, the nature of which will depend upon the administration's efforts to get more money and upon the temper of the convention delegates. All these will be watched by auto management as it attempts to determine what its action or reaction should be.

III. Management Problem

One of the most frustrating things involved in dealing with the United Auto Workers is that the union makes no secret of its major aims. It goes into negotiation with the attitude: "Well, everyone expects us to get such-and-such, so you gotta give us something like it or our boys won't take the deal."

What has made this tactic effective in a way is that the auto companies have never directly answered the union arguments during the build-up of an issue. Now, after UAW's outstanding propaganda success with its demands for the guaranteed annual wage in 1955, there is some responsible opinion that the companies should change their tactics this time. **END**

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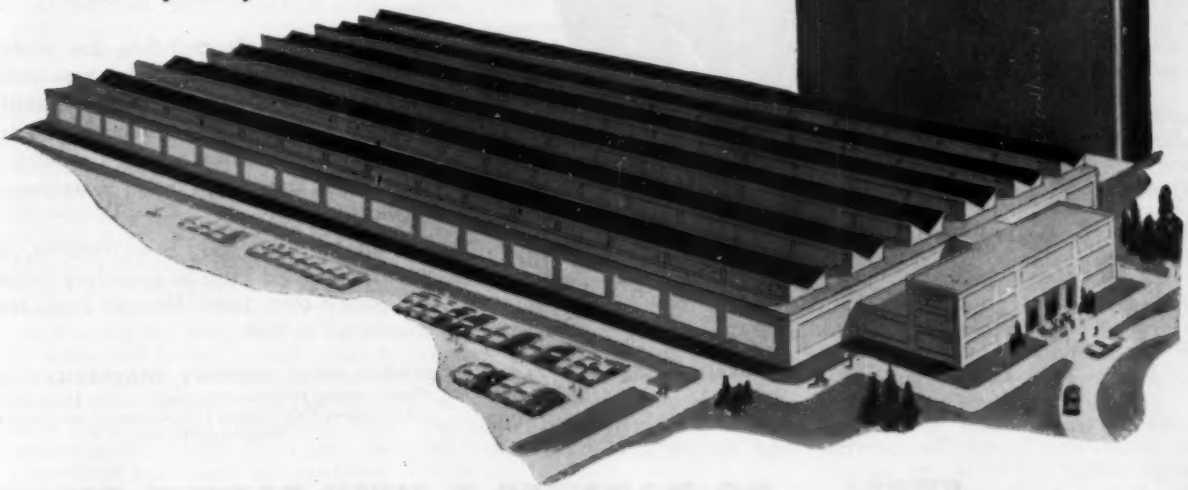


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"Reform" Laws Lie Far Ahead

● **Despite public alarm over the Teamsters probe, Congress is unlikely to act at this session.**

● **Legislation to curb unions may come sometime, but it will require a great deal of mulling over.**

● **Much depends on how well labor cleans its own house—and what new scandals may be unearthed.**

In time, new curbs on unions may be voted by Congress as a result of its probing into racketeering and corruption in labor. But despite the present atmosphere of public alarm, "reform" laws are hardly likely this session.

Three years ago this week, at a time of similar concern over frauds and abuse in union welfare funds, the Senate Labor Committee unanimously backed a request by Pres. Eisenhower that Congress investigate fund practices and adopt protective legislation. Such a measure hasn't materialized yet; details are still being debated.

This should be kept in mind amid today's outcry for new, tight labor laws. Legislating ethical standards for unions and their officers isn't something that can be done quickly and easily on Capitol Hill. It is already evident that ideas differ on what should be done, or how soon.

• **Wait and See**—Generally, the outlook is for omnibus action about the time the Senate racketeering investigations end—in 1958 or later. What it will include will depend on how effective labor has been by then in cleaning its own house, and on the extent of the evils uncovered by probers.

Dave Beck's suspension from the AFL-CIO executive council and other steps toward the enforcement of ethical practices on the Teamsters served quick notice last week that AFL-CIO is determined to do its own policing (BW—Mar.30'57,p158)—hoping in that way to keep Congress from doing the same thing through legislation. The unions aren't worried about any imminence of restrictions, but are taking fast—and decisive—steps that will show on the record when Congress does get around to considering new measures.

The importance they attach to doing this is clearly indicated by the fact that AFL-CIO action against Beck and the Teamsters risks costing the federation its biggest, most powerful union—and could have grave consequences to all labor (page 50).

• **Full Disclosure**—Despite all the talk on Capitol Hill, the only legislation that now seems very likely is a full-disclosure bill based, at least in part, on the President's recommendations in 1954. Such a bill would require unions to make public the financial particulars of health and welfare funds—and possibly provide that any embezzlement from such a fund would be a federal crime.

There is a developing sentiment in Congress to enact such a bill as a demonstration of its alarm at the racketeering revelations. The Administration and labor are behind the measure in the main—although they differ on some details. Business groups, especially insurance companies, are at most lukewarm over the idea of further federal regulation of the funds; they contend that state control is sufficient.

The present proposals for fund controls date back three years, but have been given new purpose by the Senate investigation. Some of the other ideas coming from members of the Senate Select Committee are innovations in the field of labor legislation. Others have been advanced many times before, without success.

• **The Prospects**—Here is what is being talked about on Capitol Hill and the outlook at this time:

Taft-Hartley—This law, 10 years old in June, lacks the curbs on unions necessary to deal with practices disclosed in the Teamsters probe. The clause requiring unions to report their finances to the Labor Dept. isn't sufficient. But instead of recommending T-H changes to add new restrictions, the Labor Dept. is holding back—to allow time for a thorough study of the general subject of labor and racketeering, and how to attack them through legislation.

Democratic union processes—This is a new area for specific labor legislation, aimed at loose financial operations and the strong control exerted by union officers over rank-and-file members. While plans are nebulous, some senators—including John L. McClellan, chairman of the investigating committee—are thinking about a measure requiring democratic elections, full reports by union officers to their memberships, and checks on union finances.

Political action—Some Congressional conservatives in both parties, were alarmed over the potentialities of labor's strength even before the McClellan hearings. Now they are urging statutory limitations on labor's political activities—specifically aimed at plugging what they feel is a loophole in the Taft-Hartley Act that allows unions to use dues money in some political operations. Labor Secy. James P. Mitchell has opposed such a measure in the past and probably will continue to—effectively.

Antitrust law exemption—Unions are now exempt from antitrust regulations. From time to time in the past, efforts have been made to bring organized labor under the statutes aimed at curbing monopolies. These efforts are now being revived, with the advocates arguing that the move would (1) avert many of the evils disclosed in Congressional probing, and (2) limit union pressures on production and prices. Mitchell has also opposed this in the past, and probably will again if it becomes an issue this session.

Union shop ban—Until the racket investigations, proposals for a ban on the union shop (which requires union membership under some circumstances) were a dead issue. They are being heard again now. McClellan, among others, has indicated that he might favor some such legislation—although he would prefer that decisions on the union shop be left to the states. Compulsory unionism is now banned in 18 states, the latest Indiana (BW—Mar.9'57,p166).

• **Contingencies**—What, if anything, develops out of this present thinking about tighter labor curbs will depend substantially on what happens in the months ahead.

For instance, Congressional moves to enforce higher ethical standards in handling union treasuries could depend on what AFL-CIO does about a single, effective accounting system for its 140 affiliated unions. Treasurers of the federation's international unions are now working on this.

Similarly, federal curbs on union activities will depend somewhat on the success of AFL-CIO moves against Beck. Federation officials hope that the Teamsters members will depose him—along with James R. Hoffa and other aides named in Senate hearings—after AFL-CIO cracks down. If Beck remains in office, and the Teamsters continues to be the same powerful organization that it now is, labor's self-policing will lose support and pressure for legislation will increase (page 204).

• **Federation's View**—AFL-CIO is not opposed to new laws directed strictly at controlling corruption. Its own ethical codes are tighter than most laws being

talked about now. Arthur Goldberg, special counsel for AFL-CIO, says the federation is "prepared to support any constructive legislation, if it is demonstrated that it's necessary, feasible, and practicable."

What AFL-CIO fears is that if Congress gets down to legislating during the heat of investigations, it is likely to go into all areas of union activities. This is why many Congressional leaders also favor a delay.

Who Gets the Welfare Fund?

Courts are now deciding what happens to the assets of employee welfare or pension funds if a company goes bankrupt. Unions think the workers have grounds to collect.

When a company goes bankrupt, can its employees claim the assets of a welfare or pension fund as wages?

This complex, often vital point of law has sent union and government attorneys scurrying back to their law books. At least three cases on the question have popped up recently in U.S. District Courts. One of them has gone as high as the U.S. Court of Appeals, and another—now pending in New Jersey—looks as if it's on the way up. The answer is still to be determined finally.

• **Prescribed by Law**—When bankruptcy occurs, federal law fixes the priority of creditors' claims on the defunct company's remaining assets. First crack goes to actual costs of the bankruptcy proceeding itself. Then come wages. Each employee can claim wages earned but not collected within three months before the proceeding—up to $600.

In practice, though, few employers let payrolls lag more than two or three weeks behind—even if financial disaster is imminent. In many states it would be illegal to do so. So it's a rare employee who can claim as much as $600 simply on the basis of compensation for time worked. What has happened is this: Employees have laid claim to such items as uncollected vacation pay, holiday pay, or pay in lieu of severance. In most cases, these claims against available assets have been granted, just as if they were for wages.

• **Are They Wages?**—But welfare and pension funds are another and knottier issue. The other fringe benefits involve pay directly to the employee. Money in a welfare or pension fund, however, comes from contributions to provide future benefits—not from any direct payment to an employee. There is strong discord over whether the contributions constitute wages—and how high a priority they get against available assets.

Most agreements setting up welfare and pension plans specifically provide that covered employees shall have no rights to the contributions into the plan, but only to the benefits. This being the case, can the contributions be treated as wages? The second U.S. Court of Appeals and a U.S. District Court in New York say no; a U.S. District Court in California says yes.

• **The Cons . . .**—The government has been the chief opponent of classing benefit contributions as wages in bankruptcy cases. In the lineup of creditors, the government stands behind employees in priority, and it might lose out in taxes if the claims were allowed. The argument on this side is that benefit contributions can't count as income because they are exempt from income tax, social security tax, and unemployment tax—all of which apply to income. The conclusion to this line of thought: If Congress had meant payments into employee benefits plans to be treated as wages, it would have made them subject to the tax laws.

It's also argued that benefit fund payments don't qualify as direct compensation because they aren't made in return for employees' services. Instead, the contributions simply go to purchase benefits for the workers. This was how the two courts ruling against the wage interpretation reasoned.

• **. . . And Pros**—Unions counter that the exemption from income tax isn't enough to prove that benefit contributions aren't part of wages. If Congress had wanted to exclude such payments from wages for bankruptcy purposes, it would have said so specifically, this argument goes. At the same time, labor spokesmen point out, federal law on wages and hours requires an employer to pay a premium if his pension plan doesn't have federal approval—one and one-half times his regular contribution on all overtime hours worked by employees. This linking of benefit payments with wages is regarded as a precedent for equating them in the bankruptcy court.

Taxes aside, the unions firmly hold that contributions into pension or welfare funds are made in lieu of money in the pay envelope. They say employers often tell a union after a wage agreement: "Here's 7¢ an hour—split it up however you like."

Other complications come from variations in ways of financing employee benefit plans. Lawyers frankly admit they see no solution this side of the U.S. Supreme Court. END



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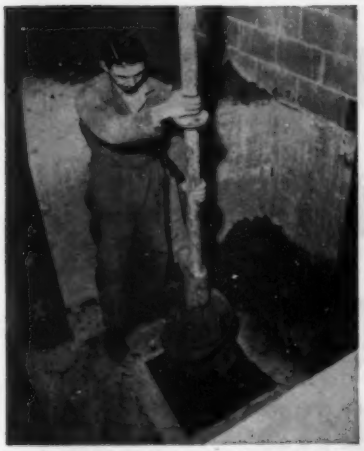
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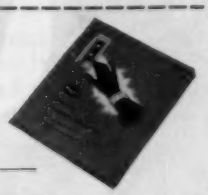
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In Labor

• • •

McDonald's Blast at Steel Prices Doesn't Show New Toughness by Union

Since the United Steelworkers election, which showed substantial opposition to the union's leadership, the steel industry has wondered whether it might be in for more USW toughness—less talk of a "mutual trusteeship."

Last week, USW Pres. David J. McDonald seemed to confirm this when he took an angry verbal swipe at Roger Blough, chairman of the U. S. Steel Corp. **McDonald's wrath arose over an assertion in U. S. Steel's annual report that industrywide unions cause inflation by compelling increases in labor costs far beyond increases in productivity.**

McDonald accused Blough of making "false charges" which are "a deliberate cover-up" to divert attention from the corporation's rapidly increasing profits and price boosts. The union head insisted that improved productivity has more than offset the cost of wage increases in recent years—and that even if it hadn't, steel price increases were more than was necessary to offset higher labor costs.

Because of the many factors involved in any set of corporate figures, the McDonald-Blough disagreement is like that between the blind men who described an elephant—their viewpoints differed according to the approach made to the same great bulk, animal or statistical.

Whatever the basis for the argument, the current Blough-McDonald dispute shouldn't be considered by itself as a sign that steel industry-union relations are getting any tougher. USW's president replied similarly to the same general arguments raised by Blough in U. S. Steel's annual report a year ago.

• • •

Supreme Court Upholds Lockout To Preserve Multi-Employer Bargaining

Employers who bargain with unions through a multi-employer bargaining association won Supreme Court approval this week for using the collective lockout as a defense against a strike against one member of the association.

In a unanimous decision, Justice William J. Brennan holds that a "temporary lockout to preserve the multi-employer bargaining basis from the disintegration threatened by the union's strike action" is lawful under the Taft-Hartley Act.

The ruling reverses a lower court, which held that the employers' use of the lockout is justified only in cases of economic hardship.

In the case decided this week, NLRB had upheld the action of seven members of the Linen & Credit Exchange—a multi-employer bargaining unit of linen supply companies in and around Buffalo—in laying off their truck drivers when a Teamsters local struck the eighth member of the association over contract terms then being negotiated. NLRB said the one walkout implied future strike action against the other companies, with the "calculated purpose" of causing successive and "individual employer capitulations."

Justice Brennan limited the high court's approval of the NLRB decision to the specific situation in the Teamsters case; it's not precedent for cases in which lockouts are used to frustrate organizing, destroy bargaining representation, or evade the duty to bargain. Moreover, Brennan made clear, it does not attempt to define the full "limits of the legitimate use of the lockout."

Finally, Brennan said the court "expressly reserves decision" on an important point in the lower court's ruling: Whether the union's strike against a single employer constituted withdrawal by the union from the multi-employer system of bargaining. The court held that no decision on this point was necessary in the Teamsters case, because the union and the association continued to negotiate and finally reached an agreement.

• • •

Machinists Find That Convair Grabs Its Bright Young Men—for Promotion

Local Lodge 1125 of the International Assn. of Machinists has a problem: Its employer, the Convair Div. of General Dynamics Corp., in San Diego, is keeping the union stripped of aggressive young leadership.

It's not a form of anti-union activity, designed to undermine the union. Rather, it's a case of competition.

A Local 1125 spokesman put it this way last week:

"Every time we get a bright young man coming along who is ripe for election to a top union office or a job as a business representative, we find that management has spotted him, too. The company notices him because of his union activities, recognizes his talent for leadership, and promotes him to a supervisory job—out of the union jurisdiction."

One reason: Convair-San Diego has expanded from 23,000 to 40,000 employees in a year's time and is keeping sharp lookout for likely candidates for supervision.

• • •

Boycott of Kohler Bars Donations To Outfits That Use Its Products

The Toledo Industrial Union Council has adopted new strategy for tightening compliance with a nationwide boycott of Kohler Co. plumbingware.

In the future, the Toledo council will not approve donations to any hospital, organization, or institution until it can verify "by personal inspection" that they are not using Kohler plumbing in any construction or remodeling work under way.

This policy, expected to be recommended by labor to other local councils nationally, is the latest weapon in a campaign to support a three-year United Auto Workers strike against Kohler.

The Wisconsin plant is operating despite the strike. Industrialist Walter V. Kohler recently denied that boycott tactics were hurting his firm.



Sinclair Reports Its Best Year *To Date*

1956, by all principal standards, was the best year to date for Sinclair Oil Corporation and subsidiaries. New records were set in:

- **NET EARNINGS**
  Total $91,070,812, an increase of 12.8 per cent. This is exclusive of a non-recurring profit of $4,835,355.
- **CRUDE OIL PRODUCTION**
  Up for the seventh consecutive year as total liquid hydrocarbon output averaged 166,528 barrels daily, a 6 per cent rise.
- **REFINERY RUNS**
  Seven domestic refineries processed 437,319 barrels daily, a 5 per cent increase.
- **DOMESTIC SALES**
  Sales of principal products—gasoline, kerosene, fuel oils—were up 2 per cent in volume, 5 per cent in dollar value.
- **TRANSPORTATION VOLUME**
  Both pipe line and marine systems delivered record volumes and prepared for even greater quantities in the future.

The Company's crude oil production and reserves were fortified by an expanded program of exploration, production and acquisition. Significant new fields were found in Texas, Oklahoma, Offshore Louisiana and Venezuela, while the Company's position in the oil empire of western Canada was greatly strengthened.

A major research project will soon be launched with the opening of a new Radiation and Tracer Laboratory at the Company's research center, Harvey, Ill. Effects of powerful gamma ray radiation on petroleum products and processes will be investigated.

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Wall St. Talks . . .

. . . about slow-motion market . . . Fairbanks stock . . . AT&T's bonds . . . dim view of building supply stocks.

Market in the doldrums: March was the Big Board's slowest month since February, 1954, and the first since November, 1953, in which no single day's trading hit 2-million shares. For the whole first quarter, trading was 21% below the year-before period, and 40% below 1955. Both bulls and bears find solace in the slowness: bulls because it shows that selling pressures are weak, bears because it denotes a dearth of buyers.

That Penn-Texas and Fairbanks, Morse scrap up to now has benefited only the FM stockholders. Their shares recently hit a record $65–70% above the 1956 low—and this week were still at $56, topping the low by 48%. But Penn-Texas shares were down to $10, which is 28% below the 1957 high, 49% below the 1956 peak, and 56% below 1955's best figure.

A huge success—but: AT&T's $250-million bond offering went over with a bang. But don't forget that its 4.30% yield was only four basis points under the yield of industrial commons as measured by one popular index.

Outlook for 1957 profits: Standard & Poor's now figures that 14 major trade groups may top their 1956 earnings by 10% or more. Another 32 may have gains below 10%, while 24 may stand substantially still. On the down side, S&P's thinks that eight groups may find their earnings off less than 10%, while only six may fall more than 10%.

Most building supply stocks have lost their popularity with many shrewd counselors. They argue that a turn for the better in home building is much more remote than optimists believe, hence many companies in the trade may find their 1957 earnings dwindling to the peril point for dividends that are already none-too-well secured.

Department of eating your cake and having it—at least in part. A Streeter points out that Sears, Roebuck "recovered," via sale-and-leaseback deals, more than 30% of the $65.4-million it spent on capital improvements in 1956.

The Rise Looks Strong

Bulls get a real chance to cheer as prices and volume move up strongly.

Are consumer goods issues closing the gap on capital goods group?

FOR THE FIRST TIME in an age, Wall Street's battered bulls this week had valid reasons to cheer—and even to cock a confident snoot at the bears.

On Monday, there had been no signs that the wheel might be turning; prices continued to drift downward lackadaisically. The change came on Tuesday. Right from the start Big Board trading showed the greatest strength in weeks. And the news spread fast. Traders and investors rushed into the market, drawn by the notably bouyant tone.

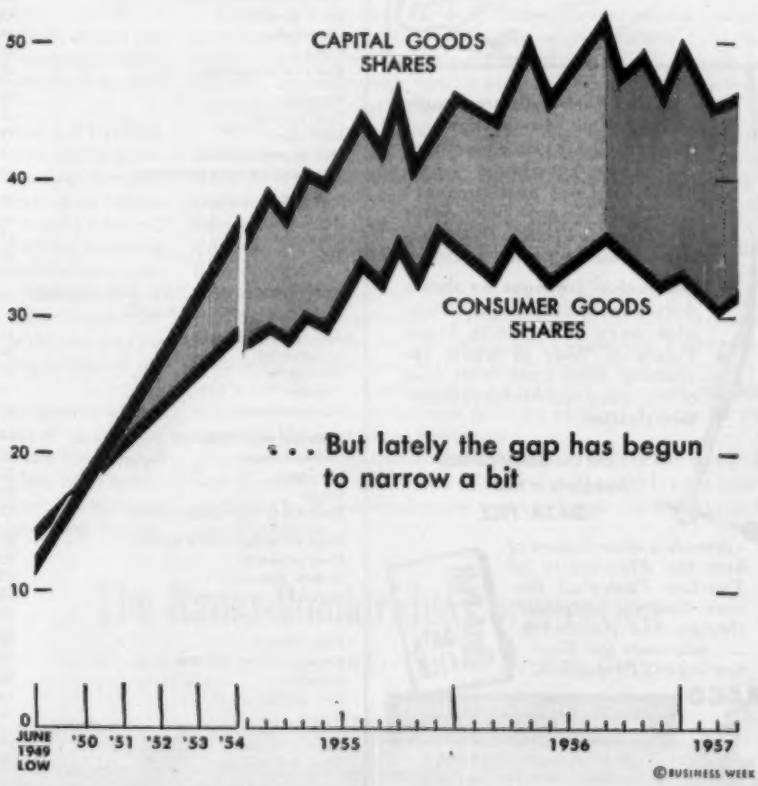
By closing time on Tuesday it all added up like this: Of all the traded issues, 48% showed gains against only 28% that sagged. New 1957 highs were scored by 48 issues, double the number that touched new lows. To add a thick frosting to the cake, volume snapped out of its persistent slump, shooting 40% above the Monday figure. The 2.3-million share total gave commission-starved brokers their first 2-million-plus day since mid-February.

• **Short Interest**—Dissenting voices were heard quickly. One swallow, the bears smugly pointed out, doesn't make a summer. Even the bulls were a bit dismayed when all of Tuesday's price strength failed to bring any wholesale covering of the Big Board's large short position.

But by and large, the upsurge looked like real strength; there were no indications that the rally was just another of the one-shotters that have been popping up of late. On Wednesday, some profit-taking operations had their lowering effect on prices. But basic strength was still much in evidence, scattered pretty generally through the stock list. Trading volume continued above the pre-Tuesday average, too, even though it showed

Standard & Poor's Weekly Stock Price Indexes (1941-1943=10)

In the 1949-'57 bull market, capital goods stocks have far outpaced the consumer goods group . . .



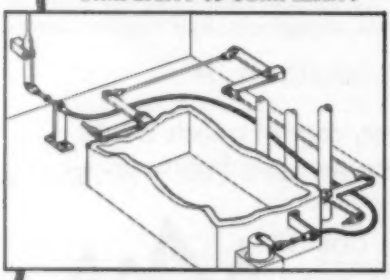
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a healthy tendency to contract a bit whenever prices began to drift down from the highs for the day.

• **Group Showings**—Meanwhile, a new question has risen in the Street: Are the consumer goods shares beginning to show strength relative to the capital goods issues?

As the chart on page 163 shows, holders of capital goods shares have feasted most heavily all through the postwar bull market; those with their money in consumer goods shares found a much more meager fare, though they too enjoyed some gains.

Thus 1952 was the only bull market year since 1949 in which the consumer goods shares actually outperformed the capital goods group. And the consumer goods shares lost their upward steam much earlier than their rivals. Their zenith came in September, 1955, when they stood 150% above their levels of mid-June, 1949. Meanwhile, the capital goods shares did not give up their upward trend until early last August, after they had staged a further 11% advance that brought their over-all market "profit" to a fat 313%.

Now, of course, both groups are far below their bull market tops. But in the past eight months, the capital goods shares have actually suffered a bit more severely than the other group.

• **Is It a Shift?**—Few Wall Streeters will go far out on a limb in saying whether this indicates the start of a reversal of relative strengths. But most of them doubt it. They point out that, when average market prices fall as much as 10%, it's natural for the biggest tumble to be taken by those that have flown the fastest and farthest.

This factor isn't the only one that makes them doubtful of a real reversal. They are also impressed by the very marked selectivity in the market inside such wide groupings as capital and consumer goods, and even within specific trades.

You can get that picture from the table below, showing how the wide variety of showings among the individual groups is blurred by the general indexes of capital and consumer goods. That's precisely why most smart Streeters have been steering away lately from recommending groups, but have confined themselves to plugging individual issues.

Beneath the Indexes

	1955 Close	*1956–57 High*	*1957 Low*	*Recent Level*	*—1956–1957 Gains— Maximum*	*Now*
COMPONENTS OF THE CAPITAL GOODS INDEX						
Agricultural machinery	22.12	22.35	20.86	21.10	+ 1.0%	− 4.6%
Building materials	55.34	68.53	57.79	58.61	+23.8	+ 5.9
Chemicals	49.26	52.30	40.62	41.27	+ 6.2	−16.2
Copper	35.96	43.65	31.70	33.54	+21.4	− 6.7
Electrical equipment	48.29	54.01	45.79	49.16	+11.8	+ 1.8
Fertilizer	48.67	50.05	37.42	39.09	+ 2.8	−19.7
Lead and zinc	14.39	15.80	12.23	12.74	+ 9.8	−11.5
Machinery	38.55	52.74	49.06	50.17	+36.8	+30.1
Mining and smelting	34.96	43.81	38.49	40.61	+25.3	+16.2
Office and business equipment	78.07	121.90	113.90	119.33	+56.1	+52.9
Railroad equipment	22.18	22.63	20.54	21.49	+ 2.0	− 3.1
Shipbuilding	34.73	47.36	42.93	42.93	+36.4	+23.6
Shipping	33.72	45.51	43.15	43.95	+35.0	+30.3
Steel	60.73	74.74	61.73	61.89	+23.1	+ 1.9
COMPONENTS OF THE CONSUMERS GOODS INDEX						
Apparel	19.56	20.87	17.14	17.51	+ 6.7	−10.5
Automobiles	58.19	60.04	49.59	49.96	+ 3.2	−14.1
Auto parts	32.63	34.70	30.64	31.54	+ 6.3	− 3.3
Brewers	33.19	36.20	27.32	28.25	+ 9.1	−14.9
Cigar makers	22.80	24.41	22.84	23.26	+ 7.1	+ 2.0
Cigarette manufacturers	14.97	15.44	14.14	14.40	+ 3.1	− 3.8
Confectionery	18.43	19.20	17.35	17.76	+ 4.2	− 3.6
Distillers	52.63	54.40	49.81	51.51	+ 3.4	− 2.1
Drugs	20.90	24.71	22.13	24.65	+18.2	+17.9
Floor coverings—carpets, rugs	15.21	16.53	15.03	16.24	+ 8.7	+ 6.8
Floor coverings—hard surface	23.86	28.88	19.81	21.70	+21.0	− 9.1
Food products	25.66	25.85	22.97	23.53	+ 0.7	− 8.3
Motion pictures	30.60	31.96	27.89	29.44	+ 4.4	− 3.8
Radio-TV, electronics	65.10	68.02	45.82	47.90	+ 4.5	−26.4
Rayon and acetate yarn	39.89	40.08	27.31	28.47	+ 0.5	−28.6
Retail stores	36.66	36.36	29.44	30.30	− 0.8	−17.3
Shoes	21.03	20.87	18.13	18.42	− 0.8	−12.4
Soaps	29.63	32.08	26.05	27.44	+ 8.1	− 7.5
Soft drinks	14.59	15.12	11.94	12.51	+ 3.6	−14.3
Sugar	16.95	23.12	20.87	21.72	+36.4	+28.1
Textile weavers	27.62	27.59	21.13	21.18	− 0.1	−23.3
Tires and rubber	126.40	137.60	121.57	124.17	+ 8.9	− 1.8

Data: Standard & Poor's Corp. Weekly Stock Price Indexes (1941–1943 = 10).

One in a series of Ramo-Wooldridge automation concepts



DIGITAL CONTROL SYSTEMS *for industry*

A new technique of automatic control, the digital control system, has been developed from electronic digital computers. Such control systems are expected to revolutionize the control of many production processes, just as computers are revolutionizing the fields of business data handling and mathematical computation.

A digital control system consists of a digital computer in combination with instruments that measure, and equipment that controls, various aspects of a production process. Instrument readings are transmitted automatically to the computer, which by means of its computational and logical operations, analyzes the situation, and selects and initiates the control actions required to achieve optimum operating conditions. The actions of the computer are determined by a program of instructions stored in the computer's memory. Changes in programs do not affect the computer itself, and this ability to make frequent and substantial changes in processing without the necessity for replacing the computer equipment is an outstanding feature of the digital control system.

This application of digital computers has become particularly attractive because of the development in recent years of instruments which quickly, continuously and automatically measure the chemical and physical characteristics of gases, liquids, and solids. Such instruments include mass spectrometers, infrared analyzers, colorimeters, X-ray and optical spectrometers, and radiation measuring devices.

Digital control systems can be utilized to improve product quality, to reduce operating costs, and to increase plant output. In multiproduct processes, they can proportion output for maximum profit; in blending operations with variable input materials, they can achieve optimum product characteristics.

While the use of a digital computer brings with it the recognized advantages of high speed and accuracy, probably the major benefit comes from its ability to make quickly many complex decisions involving a number of different variables and requiring a large number of calculations. Such decisions are completely beyond the capability of a human operator (or any number of operators) to make in the time required.

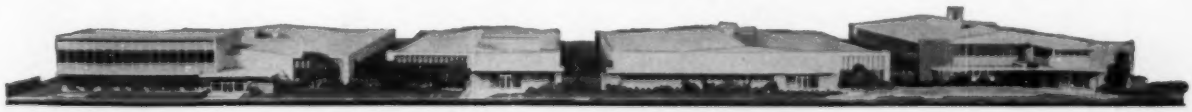
Despite its versatility, a computer for use in control applications need not be nearly as complex or expensive as are the large computers being used today for data processing and computation. Projects for industrial customers have resulted in the design of control systems where a moderate investment in new equipment for an existing plant will lead to benefits in increased operating efficiency that pay off the investment in from one to three years.

Ramo-Wooldridge scientists and engineers have pioneered in digital control systems for military uses. They are now engaged in the application of similar techniques to the solution of major industrial process control problems.

If your company has a problem in process control, we would be glad to discuss it with you and tell you whether a digital control system could provide the solution.

The Ramo-Wooldridge Corporation

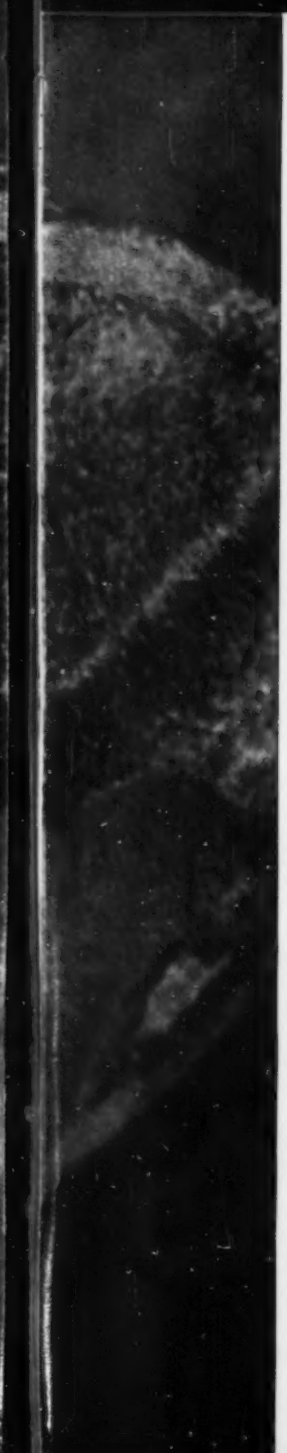
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HOW HERCULES HELPS PULL THE TEETH OF A

10-BILLION DOLLAR "BITE"



THIS BOLL WEEVIL is at his most destructive—biting into a young cotton boll. But agricultural chemicals such as toxaphene, a major Hercules development, play a vital role in limiting his depredations. Entomologists in the Hercules Laboratory carefully spray plants, then release insects on them to test an insecticide's residual effectiveness.

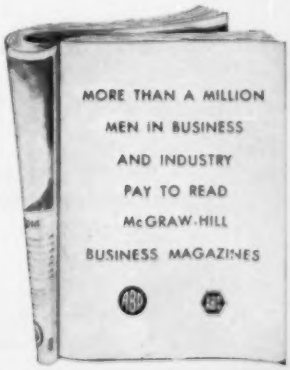


AGRICULTURAL "CHEMICAL WARFARE" is a farmer's main defense against pests that ruin over $10 billion worth of crops each year. A. E. Forster, President and Chairman of the Board of Hercules Powder Company, says:

"In our new Agricultural Chemicals Laboratory, we can put more than 300 insecticide, fungicide and plant regulatory formulations through extensive tests each month. Our research men, product development people, and the rest of our staff must keep in constant touch with what others are doing, and with new developments that affect their particular fields. It is my opinion that business and technical magazines are among their most important sources for this essential information."

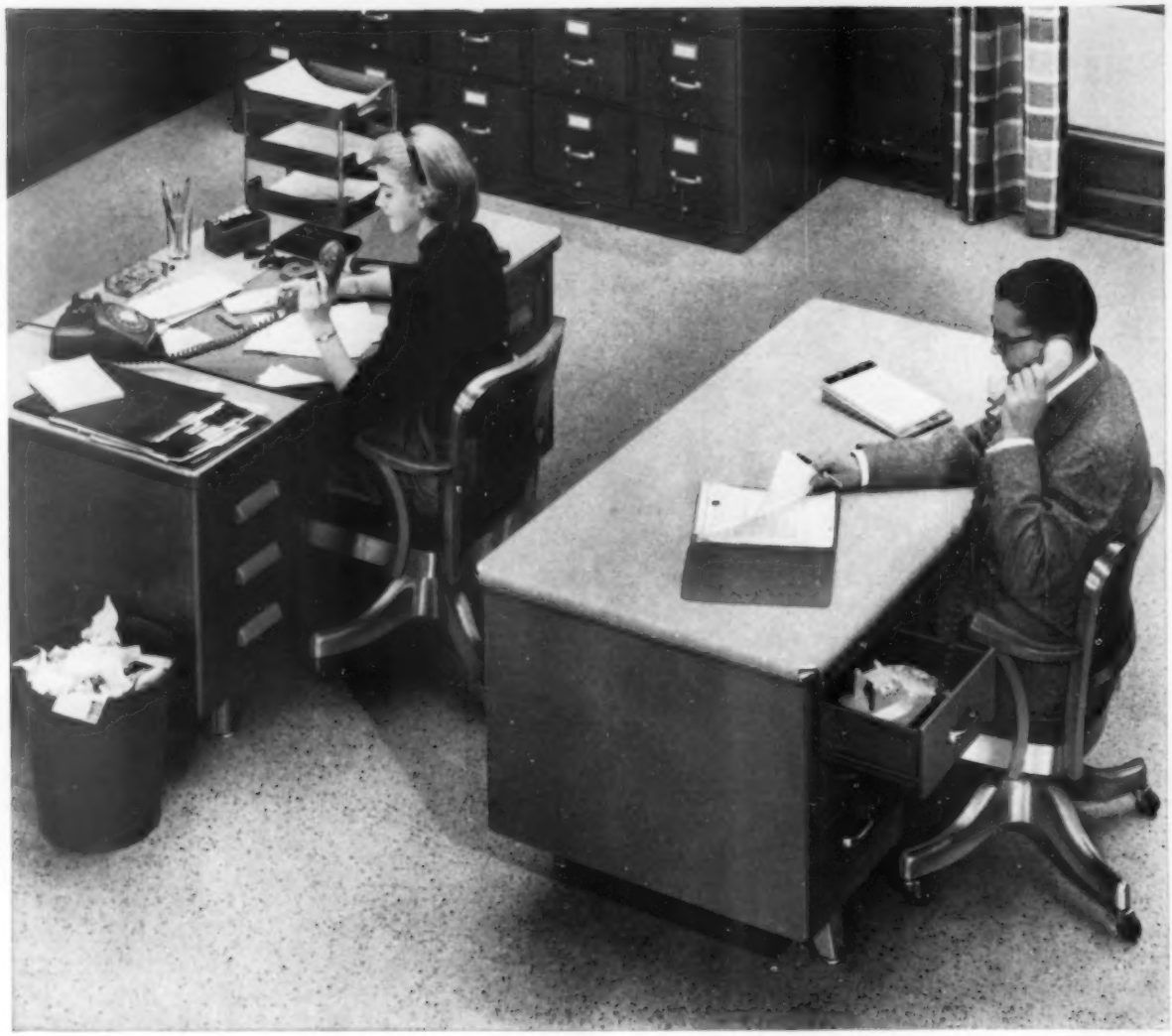
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At Hercules—and wherever men in industry must keep up with changing technologies and fast-moving business factors—you'll find them subscribing to McGraw-Hill magazines. Here, 485 full-time editors, backed by 575 field correspondents, report vital news and interpret important developments. This editorial leadership builds reader acceptance . . . not only of the editorial pages, but also for your advertising messages that appear in one or more of the 33 McGraw-Hill magazines.



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Cluttered top is fault of desk — not the person

Are men really neater than women?

Time-wasting "desk top clutter" can now be eliminated for <u>both</u> men and women

We don't want to get into any argument about the neatness of men versus women. But Shaw-Walker does know that desk neatness and work efficiency have a definite relationship. When new Shaw-Walker "Clutter-Proof" Desks go into an office, *work efficiency and work output go up.* Here's why.

Fully 75% of the things that drift around on top of other desks have a specific place *inside* this desk. There are off-the-desk trays for incoming, outgoing and pending letters, off-the-desk space for work organizers, work separators, deferred projects, tickler, binders, books, pads, forms, card lists. Most ingenious of all is an in-drawer wastebasket and provision for in-drawer phone!

With a Shaw-Walker "Clutter-Proof" Desk, *usable working space on the desk is actually doubled.*

See these new color-styled "Clutter-Proof" Desks at our local branch store or dealer or write Shaw-Walker, Muskegon 44, Michigan, for booklet "This desk is *time-engineered* to help you."



SHAW-WALKER

Largest Exclusive Makers of Office Equipment
Muskegon 44, Mich. Representatives Everywhere

PERSONAL BUSINESS

BUSINESS WEEK
APR. 6, 1957



Those upper-price "prefabs" you've seen advertised—$30,000 to $50,000 complete—are worth looking into should you set out on a house-planning tour this spring. Perhaps you're thinking of a permanent summer home.

You may be disappointed or may only pick up an idea for the house you plan to build. But it's quite possible you may surprise yourself and decide that these days prefabs are worth thinking about seriously.

If you finally decide on a prefabricated house—after mulling over their many advantages and disadvantages—you'll be joining an 8% to 10% segment of America's home buyers. In 1957, the industry (200-odd companies) expects to sell about 75,000 factory-fabricated houses—20% of these to cost over $20,000.

Leaders in the business—like National Homes (Lafayette, Ind.), U. S. Steel (New Albany, Ind.), Scholz Homes (Toledo, Ohio), and Pease Woodwork (Hamilton, Ohio)—**are pushing more and more into the higher-price brackets.** One way they're doing this is by hiring topnotch architects.

Now you can even get a Frank Lloyd Wright design—comfortably modern, $30,000 to $40,000—prefabricated by Erdman Homes, Madison, Wis. There's a one-floor plan, and a bi-level for hillside terrains.

The mechanics of buying a prefab are fairly easy. In some cases, you deal with the prefabricator's franchise holder in your area—usually a local builder. In others, you can select your own builder—he'll purchase the prefab package, just as he would any material or equipment. You sign a regular building contract.

If you take an impartial look at prefabs, you'll see a good many pros and cons. Consider the advantages first:

• **Range.** Prefabs come in all shapes and sizes. The average prefab company may have 10 or 12 basic plans, and several variations of each. You'll find three major types—**"modern"** (flat or low-pitched roofs, a lot of glass, and closed-room floor plans), **contemporary** (modified modern, styled for functional living, with "open" floor plans—one room flowing into the next), and **traditional** (mostly colonials, Cape Cods).

• **Quality.** Design standards are generally high. Many of the "bugs" found in custom houses have been worked out over the years. Usually "brand" named products are used, and prefabrication is generally good.

• **Speed.** Usually you can have your prefab finished six weeks after the foundation is set, compared to at least three months (plus architect's design time) for a conventional house.

• **Financing.** A few years ago, banks and other lenders were leery of granting mortgages on prefabs, but now they seem to be more liberal. If you use bank financing, chances are you'll need no greater down payment than you would for a conventional house. You can check this with your local banker.

• **Economy.** Because of factory fabrication, you save on materials and labor. Design cost is quite a bit less because you don't pay a full architect's fee—only a fraction of it as part of the cost of the prefab package.

Here's a typical cost breakdown on a prefabricated home—$38,845 complete: land, $5,000; foundation, $3,000; fabricated panels and parts, $9,400; plumbing, $2,500; heating, $2,000; electrical work, $1,350; complete kitchen, $3,800; interior finish, $1,750; exterior finish, $750; laundry, $695; fireplace and chimney, $1,200; driveway and landscaping, $1,300; survey, permits, legal fees, $1,100; erection cost, $1,500; builder's gross profit, $3,500. **The same size home, custom-built,** would probably cost $2,000 to

$4,000 more—plus an architect's fee of $2,000 to $3,500. Your prefab savings come from just two items—"fabricated panels and parts" and "erection cost." All other items are the same as in conventional building.

Prefabs have some clear-cut disadvantages, too, to keep in mind:

• **Restrictions.** Some towns have zoning laws or building codes that, in effect, rule out prefabs. You'll also run across deeds with this sort of restriction.

• **Mode.** Prefabs tend to be standardized—lacking in warmth and personality, even in upper-price ranges. They are well suited to informal, fast-paced living, but lack many of the refinements that contribute to "gracious" living. Some architects will tell you that prefabs tend to be over-designed, with too much emphasis on gimmicks and gadgetry.

• **Frame.** Today you are limited to frame prefabs. You can't get brick or fieldstone, for example—though brick and stone veneers are used.

• **Terrain.** If you have an unusual terrain, you may not be able to take full advantage of the beauty your land offers—because the variety of prefab plans is limited.

• **Cramp.** Some architects will say, too, that prefabs are designed for display tours—with big living rooms and de luxe kitchens, but with small bedrooms. You can take a yardstick along and settle this with no trouble.

• **Risk.** The ultimate success of the house will depend a lot on the builder's crew. A slipshod job can ruin a prefab. It's often a good idea to have an architect, or someone who knows construction, check on the building from time to time—and keep an eye out yourself, of course.

Remember, though (and remind your wife)—if you ask for too many "personal touches," you'll soon wipe out any possible economy.

—•—

If your son is in high school or about to enter college and can't decide how to fulfill his military obligation, here's an updating on recent policy changes he'll want to know about.

• **National Guard.** Previously, if a man joined the Guard, his only duties were weekly night drills and a two-week summer camp. Now, in addition, he must serve 11 weeks on active duty as soon as he joins, to remain draft exempt. **And beginning next Jan. 1,** he'll have to take six months' active training, plus three years in the "ready" reserve (weekly drills and summer camp), followed by 4½ years in the "standby" reserve (no training required). In effect, then, he'll have the same obligations as an Army reservist—but also will be liable to call-up on the governor's order.

• **Army.** The six-month training program was formerly for ages 17 to 18½; now a man who is 25 or under can join. Also, "ready" reserve time has been shortened from 7½ to three years.

• **ROTC.** Although there's no change in the two-year active duty rule, right now there is an oversupply of eligible ROTC officers. So currently an ROTC graduate can fulfill his legal obligation by **volunteering** for six months' active duty, plus three years in the "ready" reserve.

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For the executive who likes to cook the chef at Bookbinder's Restaurant, Walnut St., Philadelphia, suggests "shrimp du jour." Saute 3 lb. shelled shrimp. Add: 2 teaspoons Worcestershire sauce, 1 clove of chopped garlic, ¼-cup each of chopped parsley and chives; salt and pepper. Place in large casserole; top with grated sharp cheese and bread crumbs. Add drawn butter, then brown under broiler. Serves 6.

Contents copyrighted under the general copyright on the Apr. 6, 1957, issue—Business Week, 330 W. 42nd St., New York, N. Y.



Brush wire, crimped (as shown) or straight, now produced in multiple strand, and furnished in coils or straight banks depending on wire size.

How a **new idea in wire** *cleaned up a brush production problem*

• Maybe you can profit by the kind of interest and action applied to customers' problems by the Worcester Wire Works Division of National-Standard. Take wire brush manufacture for example . . .

Until recently, brush manufacturers had to cut through a coil of wire, then gather by hand and by guesswork the approximate number of wires for the type of brush in production. Naturally this involved a lot of cut-off waste, plus the wire lost through faulty guesswork.

Now, to overcome this waste, Worcester Wire Works has developed ways to produce and furnish wire in predetermined bunches (up to 400 wires per bunch) with *exactly* the right number of wires for a given brush. Much costly loss is eliminated, more brushes are produced per pound of wire, and production is speeded.

The point is, Worcester Wire Works people specialize in more than quality wire. They also specialize in the kind of service and exploration that time and again cuts costs for customers. Better check with them on your wire needs. You'll like the way they do business.

NATIONAL NS NATIONAL STANDARD **STANDARD**

DIVISIONS: NATIONAL-STANDARD, Niles, Mich.: *fine wire, stainless, music spring and plated wires* • **WORCESTER WIRE WORKS, Worcester, Mass.:** *high and low carbon specialty wires*
WAGNER LITHO MACHINERY, Secaucus, N. J.: *metal decorating equipment* • **ATHENIA STEEL, Clifton, N. J.:** *flat, high carbon spring steels* • **REYNOLDS WIRE, Dixon, Ill.:** *industrial wire cloth*



Weeds are a hazard you can't afford

Get rid of them with Baron, Radapon and other Dow weed killers

Inside this plant, every safety precaution has been taken. Thousands of dollars and hundreds of man-hours have been spent to prevent fire.

Outside—only a few feet away—stands a tank car filled with flammable materials. Dry, oil-soaked weeds cluster around it. If that tank car goes, all the "no smoking" signs in the world won't keep fire out of the plant!

But fire is only one hazard. Oil or other liquids spilled on the weeds may cause a workman to slip and severely injure himself. Weeds can also interfere with switches, hide lost tools from view and generally obstruct operations.

Prevent these hazards the easy, low-cost way with Baron*, Radapon* and other Dow weed killers. Your own men can do the job, or professional contractors will assume full responsibility. Let us send you more information and the name of a qualified distributor near you.



Write for free new booklet, "Industrial Vegetation Control". THE DOW CHEMICAL COMPANY, Midland, Michigan, Department AG 313.

*Trademark of The Dow Chemical Company

YOU CAN DEPEND ON DOW

In Management

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U.S. Court Upholds Auto Makers Right To Drop Dealer Who Didn't "Blitz"

Auto makers are justified in canceling the franchises of dealers who do not cooperate in "blitz sales" programs, a federal judge has decided.

The case was brought by Miller Motors, Inc., Winston-Salem (N. C.) Lincoln-Mercury dealer, against Ford Motor Co. in the midst of manufacturer-dealer upsets in the summer of 1955 (BW—Aug.13'55,p54). It differed from other legal attacks on the auto companies in that it charged violation of the Sherman and Clayton anti-trust acts, but did not allege a conspiracy between the manufacturer and other dealers.

Ford terminated its agreement with Miller, giving the standard 60-day notice, because of the dealer's refusal to follow suggestions of Ford's regional sales manager. In his 38-page decision, Judge Roszel C. Thompsen said a manufacturer may conduct business by "promoting productive business relationships and channels of distribution, while abandoning those which are relatively barren." He said Miller was openly and avowedly antagonistic "to Ford's sales policies."

Although calling the contract a "one-sided document," Judge Thompsen held that by signing it Miller had "surrendered his right to litigate his grievance." Miller had asked for treble damages amounting to almost $1-million.

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Armistice Terms at Thermoid Give Graham-Paige Six New Seats

The long-running battle involving Thermoid Co., Trenton (N. J.) maker of brake linings, fan belts, and shoe soles and heels (BW—Sep.8'56,p134), has been at least temporarily settled.

Thermoid's board has been expanded to give representation to Graham-Paige Corp., a closed-end investment company, which claims to own about 20% of Thermoid's stock. Graham-Paige has waged proxy battles over the past few years, and went into court last November over attempts to get on the board. Now Thermoid has increased its board to 15, appointed pro-Graham-Paige men to the six new seats. Three Graham-Paige men also go on the executive committee, expanded from four members to seven.

Meanwhile, a federal case against ex-Chmn. Frederic E. Schulter, charged with filing false and misleading statements with the New York Stock Exchange, came to an end. Schulter pleaded no defense, last week was fined $40,000, and given a seven-year sentence, suspended because of his poor physical condition.

Two other former Thermoid officials indicted with Schulter were also sentenced. Former president George S. Fabel was fined $25,000 and received a suspended jail term; Robert R. Stevenson, who had been controller, was not fined but was given a suspended jail sentence.

MORE NEWS ABOUT MANAGEMENT ON:

- P. 174 Burroughs' Three-Way Split
- P. 182 Changing a Company Name
- P. 187 Who's Who in the Organization

• • •

Union Electric Gets SEC's O.K. On Proxy Solicitation Material

The Securities & Exchange Commission has approved proxy solicitation material prepared by Union Electric Co., a supplier of electric power to St. Louis and other cities in Missouri, Illinois, and Iowa. SEC's decision came after two days of hearings on charges brought by J. Raymond Dyer, St. Louis attorney and dissident stockholder.

Dyer's charges that the proxy solicitation material contained untrue statements and omitted important information caused SEC to invoke a seldom-used rule of the Public Utility Holding Company Act empowering the commission to hold the hearings (BW—Mar.16'57, p80).

SEC O.K.'d the material, but ordered one addition: a reference "to the pending investigation by the commission" to determine whether the company violated a provision of the utility holding company law forbidding political contributions. The investigation arises from a $35,000 payment made by the company, which ended up in the secret bank account of Orville Hodge, former Illinois state auditor, now serving a jail term for theft of state funds.

• • •

Management Briefs

Continental Can Co. has asked stockholders to authorize a change from the company's present staggered system of electing directors to one in which the entire slate would be elected each year. "Less complex and more flexible," says management.

Proxies for the annual meeting of Vertol Aircraft Corp. are being solicited by Brooklyn attorney Milton Robinson, who names no other member of his "Protective Committee," and claims to own 10,000 shares of Vertol—somewhat less than 2%.

Columbia, Paramount, and RKO have followed 20th Century-Fox Film Corp. in an off-beat diversification move. The three film makers have signed an agreement with Union Oil Co. of California to allow drilling of oil lands located on studio property.

Dissident stockholders at Mesabi Iron Co. (BW—Mar.23'57,p191) have taken their dissatisfaction to court. Three of them have brought action in Delaware Court of Chancery to cancel the contract under which Taconite property leased to Mesabi is mined by Reserve Mining Co.

Splitting a Company Lets It Move Faster

Burroughs Corp. was doing fine. Yet it decided to break into three major divisions, each highly independent.

IN THE LAST decade, the Burroughs Corp., Detroit-based maker of mechanical and electronic business equipment, has boosted its volume from $40-million in 1946 to $273-million last year, its net profit from $1.7-million to more than $14-million. Last month, in spite of an obviously successful system, Burroughs tore itself apart, and reorganized.

For nearly 75 years, Burroughs has operated as a straight-line company, with its president and other top officers directing all day-to-day operations. But Pres. John Coleman and Exec. Vice-Pres. Ray R. Eppert were concerned that its traditional pattern was outmoded in an industry that is both growing and changing drastically. The company's own growth was making its direct line administration unwieldy. Development of both new products and new managers seemed too slow for effective competition.

So Burroughs loosed its divisions from the apron strings and set them up as autonomous operations. "Today you can't buy management men, you've got to breed them," say Burroughs people. "You can't breed them if you never give them the authority and responsibility." Coleman and Eppert hope that their successors in the company's top jobs can come from the divisions.

• **Learning to Walk**—The division's emancipation from parental authority is still causing some fuss. Notes Coleman, "The hardest thing to learn is not to interfere with the divisions." A division manager worries: "We've been given such freedom from control that sometimes we're scared about what we're doing on our own."

But for Coleman and Eppert, growing pains have so long been a part of their corporate experience that they'd probably be lonely without them.

I. Postwar Comeback

Ever since World War II, Burroughs has been trying to catch up in its industry. It came out of the war with a solid name in adding machines, almost no inventory, outdated production methods—and little else.

"The old management," says one current Burroughs staffer, "paid out all the dough in dividends, nothing for new product research."

John Coleman took over as president in late 1946, after 26 years with the company. He installed Burroughs' first mass production line, strengthened its marketing, put it strongly into research, and started adding new products and new companies.

Since then Burroughs has bought two companies that make carbon paper and adding machine rolls (Mittag & Volger, Inc., and Acme Carbon & Ribbon Co., Ltd.), one that makes accounting forms and system (Charles R. Hadley Co.), and a maker of check-writing machines (Todd Co.).

• **Electronic Touch**—While Burroughs was still trying to catch up in the conventional business equipment field, the character of the competition was changing. Other companies were putting most of their weight behind the development of electronic systems. So Burroughs started buying its way into the electronics business, too.

In 1951, Burroughs picked up its first electronic company—Control Instrument Co. of Brooklyn—to give it a wedge in defense work. In 1954, it took over a tube manufacturer, Haydu Bros., and opened an electronic components plant in Philadelphia. A year later, it followed with another plant in Detroit for electronics defense production.

Meanwhile, International Business Machines Corp. had solidified its lead in electronic products for business. Remington Rand countered by merging with Sperry. National Cash Register Co., ranking third in the industry, worked out a joint development deal with General Electric Co. on computers. Burroughs had built large computers for research work, had a small one in the works (the E 101), but had no medium-sized computer.

• **First Division**—To round out the line, Burroughs last summer bought the Electro Data Corp. of Pasadena, Calif.

Electro Data already had its own management team. Its own products were quite different from Burroughs' conventional line, and it had its own manufacturing and engineering facilities. Besides, it was too far from Detroit for practical day-by-day administration from headquarters. So, Electro Data became Burroughs' first autonomous division.

By that time, Coleman and Eppert had already decided that Burroughs



PRES. JOHN COLEMAN: "Since you can't buy management these days, we've got to grow our own more rapidly."



EXEC. V-P RAY EPPERT: The divisional setup helps to "create an environment for management development."

"That Magnet Has Cut Our Unloading Time in Half-- and That's Not All!"



• The Lindell Drop Forge Company of Lansing, Michigan was using a 10-ton overhead crane, with hooks and chains, to unload bar stock steel from railroad cars. It was a slow procedure, causing periodic "traffic jams," especially when several cars of steel came in at the same time. Equally important, it presented a constant safety hazard to the "hook and chain" men working in the cars.

At the suggestion of Field Engineer **BARNEY CHAPMAN** the existing crane was equipped with an EC&M* lifting magnet and magnet controller—replacing the hook and chain set-up. By letting the powerful lifting magnet do the work, *unloading time was cut in half and the safety hazard was eliminated—completely!*

*EC&M Magnets and Controllers are manufactured by The Electric Controller & Mfg. Co., a division of the Square D Company

At your service—in 3 important ways

Field Engineers are available through Square D branch offices in all principal United States cities—and in Canada, Mexico and England. Backing up these engineers are the *design and manufacturing facilities* of 14 strategically located Square D factories and the localized services of a *nation-wide network of authorized electrical distributors.*



Barney Chapman

NOW...EC&M PRODUCTS ARE A PART OF THE SQUARE D LINE

SQUARE D COMPANY

NEWS OF THE MONTH FROM SQUARE D

HOUSEPOWER HONORS...Square D was one of five national companies recently cited for outstanding service in promoting increased use of electricity in the home. Award was made by E. O. George, V.P. in Charge of Sales, Detroit Edison, and Chairman of the Wiring Promotion Committee of Edison Electric Institute, currently sponsoring a national HOUSEPOWER consumer education program.

• • •

CANADIAN GROWTH...Canada's rapidly growing west coast markets will be served from Square D's newest assembly facility, just established in Vancouver, British Columbia, to supplement the main Square D Canadian plant in Toronto.

• • •

CENTURIES OF SERVICE...204 "veterans" received awards at the Old Timers 10th Annual Banquet, recently held by Square D's Distribution Equipment Division in Detroit. Over 4,300 years of service to Square D and the electrical industry were represented by the membership of this select Club, limited to those who have been with the company 20 years or more. Other Square D divisions have similar clubs.

• • •

MORE EXPANSION...Newest plant in Square D's construction program is rising at Glendale, Wisconsin. Fully automated for faster and more efficient production, this 183,000 square foot facility will move into production at mid-year. It will supplement the main Milwaukee plant, manufacturing motor control components used in line production operations.

• • •

PROGRESS REPORT...Sales management from Square D headquarters and field offices all over the United States, Canada, and Mexico met in Cedar Rapids, Iowa, this month to review progress of the company's 1957 sales program. The group also inspected Square D's new automated circuit breaker plant, now operating at peak production.



a dictating machine is no longer a luxury!

NOW, YOUR OFFICE can have as many as it needs – because the world-famous STENORETTE costs less than half the price of other major dictating machines, *actually less than a standard office typewriter!* It does everything the high-priced units do – and more. It's the easiest, and fastest of all to use. That's why so many executives prefer STENORETTE to other units regardless of price.

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DICTATE AND TRANSCRIBE WITH ONE MACHINE! The accessories are designed for convenience and comfort of secretaries. "Index Dial" and log pad make transcription easy, foolproof. "Playback" is always clear and natural. Ideal for conferences and trips. *Use STENORETTE in a moving car, plane, train!* (weighs only 11 lbs., 10 oz.)

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for less than the price of a standard office typewriter!

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Transcribing accessories extra.

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should be divisionalized. Actually the move had begun with one of Burroughs' own products, before Electro Data came into the picture.

In working with a new product, the company's traditional method was to have development and engineering done by the central staff. When a machine was released from the laboratory, plant tool engineers would get in their licks. To meet new specifications, the product might go back to the lab for refinement. Not infrequently, several years would elapse between conception and commercial development.

• **Faster Results**–In 1955, Coleman and Eppert tried an experiment that was radical–for Burroughs.

The company has been making a standard accounting machine–the Sensimatic–since 1949. It will soon start marketing a quite different accounting machine, to be called the Typing Sensimatic. To bring this machine from conception to production in quick time, Coleman and Eppert created a brand-new division, housed in the company's plant at Plymouth, Mich.

Engineers were detached from central engineering and assigned to the new Plymouth division. The plant manager became general manager, charged with bringing the product to market. His division started working–on what was still merely a conception–on Sept. 1, 1955. When the machine appears commercially in a few months, it will be a full year ahead of Burroughs' usual time for the job.

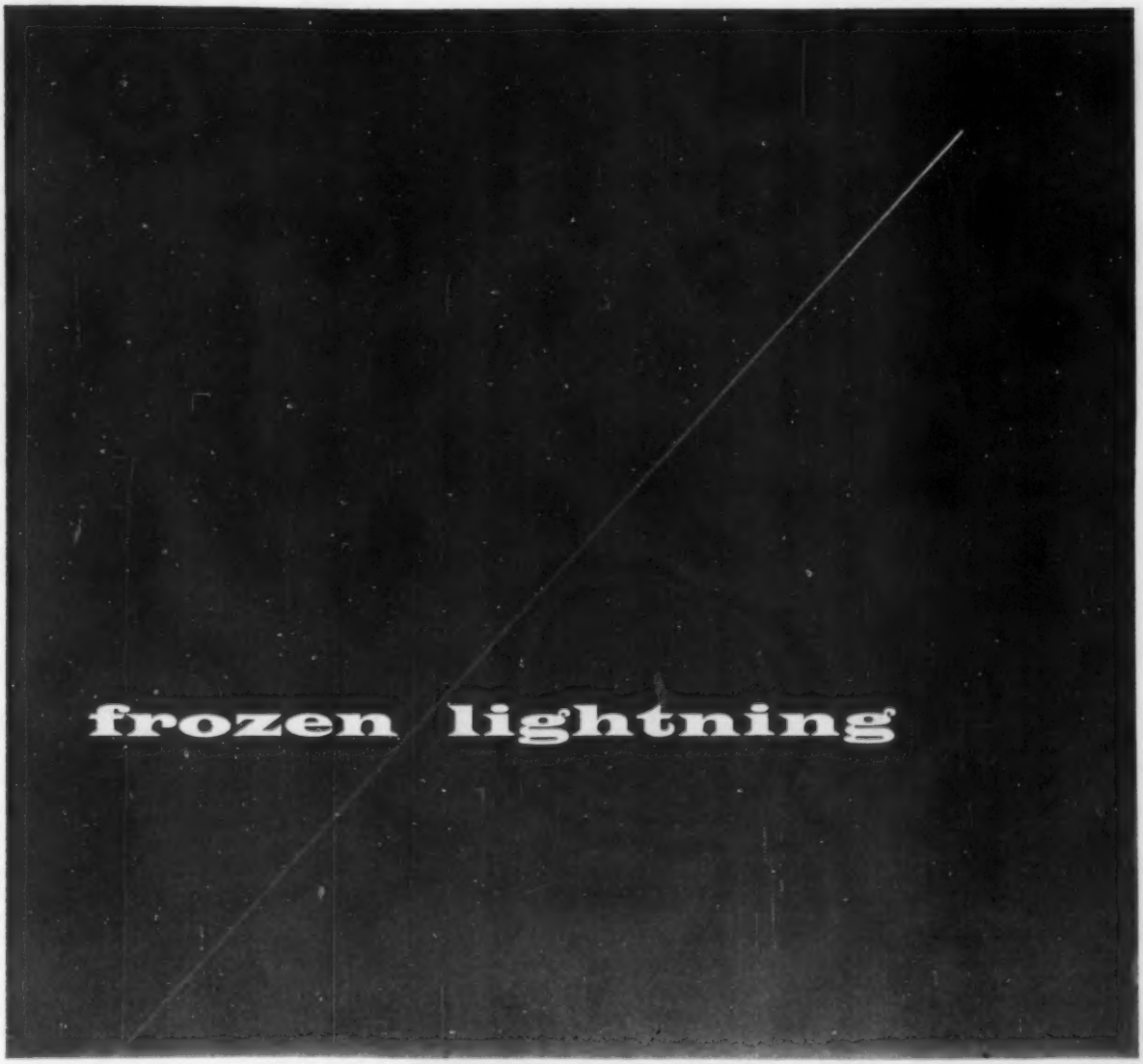
Burroughs officials had realized that if the company were to grow, it would have to develop new products faster. The Typing Sensimatic test proved that one answer was greater divisional autonomy.

• **New Setup**–A new organizational plan, drawn up chiefly by Eppert, went into effect last Feb. 1. Now the company is broken up into three major divisions: Electro Data, International, and Burroughs.

Electro Data takes over the electronic data-processing and computer field–including supervision over the E 101 computer, though that product is still being manufactured in Detroit. It'll have its own sales force for computers, leaving the business machine sales offices to concentrate on what they know best. Electro Data will probably also inherit a company headache–final development of a high-speed electronic printer, announced with fanfare three years ago but not yet brought to commercial life.

The International Div. takes over all engineering, manufacturing, and marketing for the company's overseas subsidiaries.

The rest–essentially all business machine or business system applications–is wrapped up in the Burroughs Div.,



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which includes the new Plymouth division, Detroit engineering and manufacturing divisions, and the Canadian plant in Windsor.

Eventually, this will be broken down further. It's expected that all defense products—which account for about one-third of Burroughs' sales—will be lumped in a separate group. Another group will include commercial electronic products that fit neither under data processing nor defense categories, and still another division will handle the check-writers, carbon papers, and business forms.

III. Breeding Managers

Even more than new products, Burroughs hopes to get new managerial talent from within the new organization setup.

Although the company has always had individuals specifically charged with over-all supervision of manufacturing, marketing, and research, the men on lower levels were kept rigidly in specialist slots. Those who made and sold the products never made major decisions. There was always someone at headquarters to do that.

Today, headquarters manufacturing and marketing men have been transferred to a staff, rather than a line, capacity. They have responsibility for over-all corporate policy and planning, but are not responsible for day-to-day operation.

For instance, Carl E. Schneider, now vice-president and general manager of the big Burroughs Div., reports directly to Eppert and has complete responsibility for the competitive and profit position of his division—and for proving his own ability to train his successor and then to step into a higher corporate job. Schneider was formerly vice-president for personnel, but he has had previous accounting and marketing experience.

• **Wider Experience**—What Burroughs is after, says Eppert, is to "create an environment for management development." Corporations must have specialists, he agrees, but a man needs a wide range of experience to earn a place at the top level. The specialist needs access to the broad panorama of management—finance, marketing, manufacturing, and engineering—and he gets it in autonomous divisions.

The need for wider training alone may expedite the further divisionalization of the company. As a producer of devices that convey management information, Burroughs can hardly avoid further growth with the growth of a complex economy.

"Since you can't buy management these days," says Coleman (the company recently turned down acquisition of a large company because it felt that

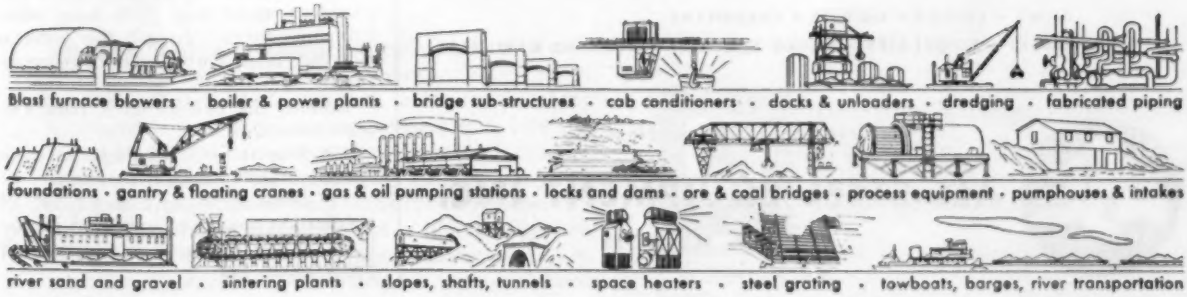


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the latter was weak in its top men), "we've got to grow our own more rapidly."

• **Hard to Learn**—Coleman hopes that the new widespread delegation of authority down the line will tighten up the whole operation.

In some cases, the delegation is coming hard. None of the Burroughs staff executives has yet gotten used to dumping problems in a division general manager's lap and letting him wrestle them alone.

"But we've got to learn not to interfere," says Coleman. "Business is getting so big that it's impossible for an executive to worry about both the sum of the parts and the parts themselves. A man can't sing tenor and bass at the same time."

House Organs Grow Up Into Real Mass Media

Industrial publications—once the stepchild of the personnel department—have attained a new status on the U.S. corporate scene, according to the International Council of Industrial Editors.

In the U.S., Canada, and Hawaii there are now more than 9,000 house organs—including both internal (for employees only) and external publications (for promotional uses). Of the total, 63% use magazine format, many with slick paper and fancy color work. Another 26% are newspapers; the rest appear as pamphlets or newsletters. Most come out once a month, although frequency of publication ranges from daily to quarterly.

The cost to industry for all this adds up to an estimated $172-million per issue.

• **Richer**—In the past few years, more than one-third of the house organs have grown in size. The editors' paychecks have swollen, too—half of them now make more than $500 a month, compared with only one-third earning that much in 1951. A prosperous 5% now get more than $900. More than one-third the editors are ex-newspapermen.

Within the company, there's new importance for the house organ editor—16% of them report directly to the president, more than 75% have other company duties. To get the publication out, many employ one or more assistants.

Editors, the council finds, have two main complaints:

• Almost 50% of them have no specific budget for their magazine.

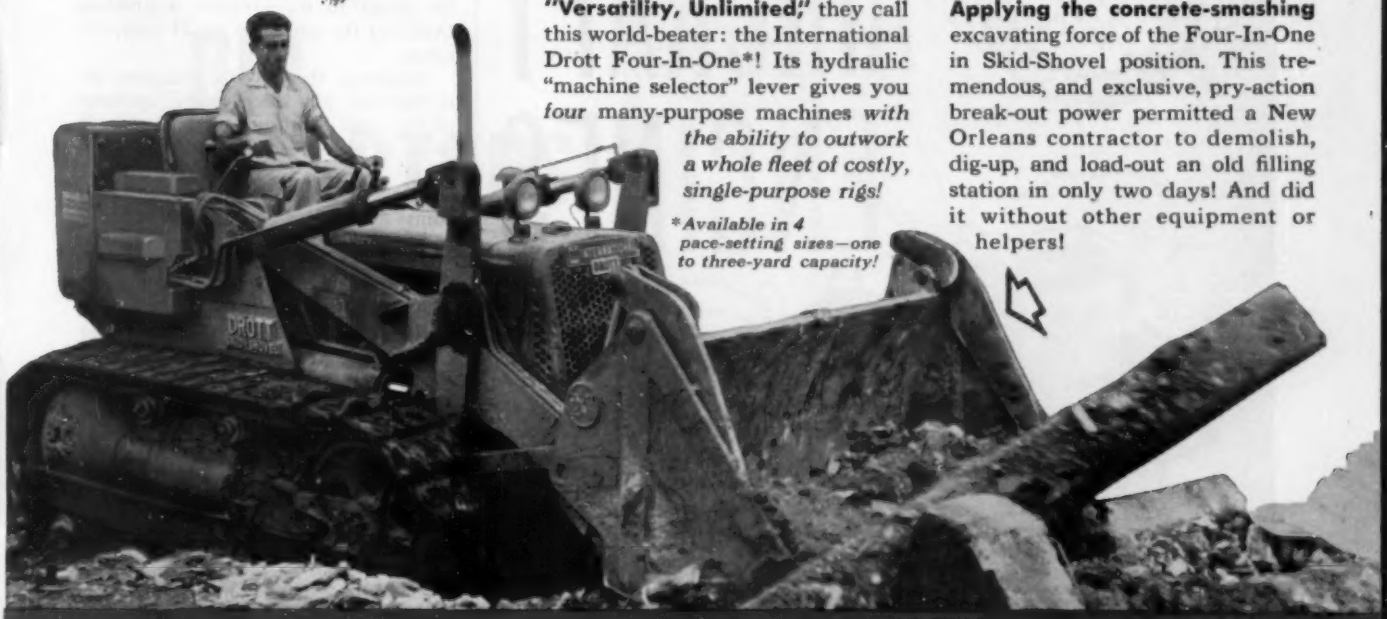
• Only 40% have a set list of publication objectives, approved by top brass, to use as a guide in editing their publications. **END**

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1 Excavator-Loader **2** "Carry-type Scraper" **3** Many-purpose Clamshell **4** Earth-rolling Bulldozer



As "carry-type scraper", this Four-In-One gives inch-close lot-grading accuracy—to an Indianapolis housing project developer. He can precision-spread the load on low spots, increase home attractiveness, reduce the home-buyer's landscaping costs with this outfit!



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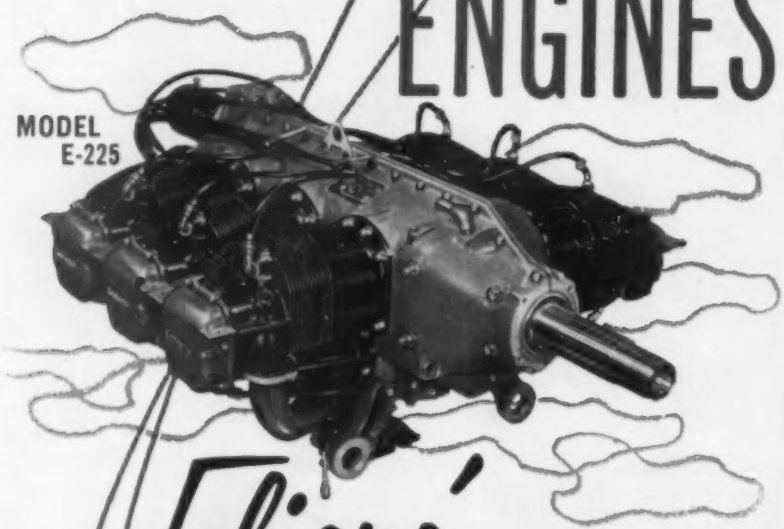
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E-225	225	2650	6	363	80
O-470-K & L	230	2600	6	438	80
O-470-M	240	2600	6	450	91/96
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Moniker Woes

Detroit Harvester wants new and more descriptive name. But suitable label proves elusive.

Stockholders of Detroit Harvester Co. are about to try to solve a problem troubling the company for 21 years: its name.

Sometime this month, company directors will ask stockholders' approval of the name they think best, or will ask them to choose one of several suggestions.

The directors won't bother with names so obvious as Detroit Harvester Industries or Detroit Power Products. Nor will they propose such tricky combinations as Automotronics or Dynamerica. Those already have been rejected.

• **Nobody's Baby**—The problem is that Detroit Harvester usually is regarded either as a subsidiary of International Harvester Co. or as a single-line producer of farm implements. It is neither. J. Thomas Smith, president, makes it plain that his company isn't anybody's subsidiary. It's a fully grown, 35-year-old corporate entity.

What's more, says Smith, farm implements make up but a small part of business these days. Only about 10% of the company's $47.4-million sales volume last year was farm machinery. The auto industry accounted for 40% and various metalworking projects comprised the balance.

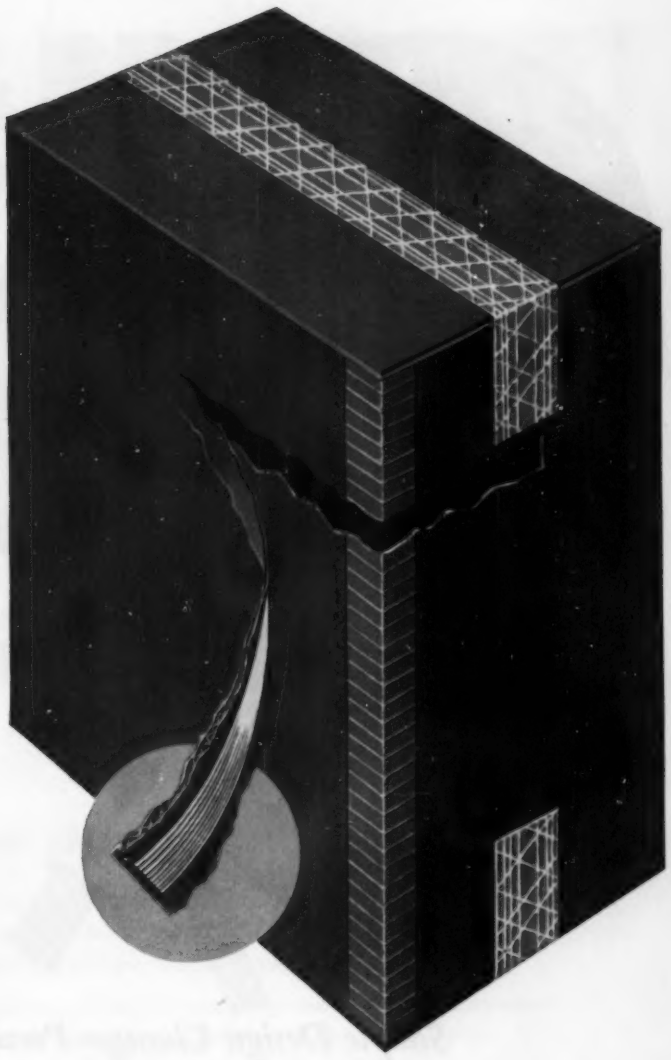
Last January, Smith, whose own name is cause for confusion—("There's a Tom Smith on every corner, so I put a 'J' in front of mine")—asked stockholders to choose a name "more in keeping with the diversified nature of the company's expanding activities." The board of directors mulled over hundreds of suggestions, but found none of them suitable, and the annual meeting was recessed until April.

• **20-Year-Old Problem**—The confusion dates back to 1936, when Detroit Harvester took over Dura of Toledo and started making hardware for autos and household appliances. Founded in 1922 to make hay mowers for the Fordson tractor, the company was doing 80% of its business with the auto industry by 1950. It since has diversified further, and manufactures products ranging from coolant pumps to post-hole diggers in its seven divisions.

"Going into a new territory now is confusing to people not familiar with our company," says Smith. "Then too, investors are misled. No one knows who we are."

• **Ideas**—When Smith finally decided that a name change was in order, he expected no difficulty finding a new

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one. "First we took 10 or 12 standard prefixes—like General, Allied, Continental, American, Standard, and U.S.—figuring it would be easy to form a name from one of them," he says. "We worked out 30 or 40 different combinations, and sent them to the eight states in which we either do business now or plan to in the future—New York, Illinois, Michigan, Ohio, Indiana, Kentucky, Pennsylvania, and California. Our new name has to qualify in all those states. Sometimes we would qualify in five states, then get knocked out in a sixth because of a conflict with an existing company."

The board then tried forming combinations with several of its divisional titles, such as Motor States Products & Dura, but none of them worked. "We found a lot of people use Motor States Products," says Smith, "and we didn't want to pin down the company to any one of its divisions either. We want a neutral name."

• **Rejects**—Smith turned next to the company's market research group, which suggested keeping Detroit in the title but adding another word that would provide a bridge to the company's many activities. Detroit Dynamics Corp. was its answer. "But there's a General Dynamics Corp. which more or less preempted that name," says Smith. "Also, the general public usually associates dynamics with electronics, and our business is metalworking. We also were afraid of being taken for a division of another company, again."

Finally, letters were sent out to investment offices for ideas. This brought another flood, but nothing satisfactory.

"We rejected Detroit Implements Corp. because it has an agricultural flavor. Detroit Diversified was thrown out because it has an alley shop connotation—too small. Pioneer Products & Engineering was too long. There are too many Pioneers, anyway," says Smith. Midwest Industries was scrapped as "too common." And so it went. Other rejects: Dumo Industry, Automotronics, Detroit American, Dynamerica and Dyna Craft. General Equipment, General Industries, United Equipment, United Industries, Universal Equipment, and Universal Industries all were refused. A Detroit banker offered Detroit Harvester Industries, Inc.; Detroit Dura Corp., Detroit Pioneer Co., Detroit Power Products, Inc., and Detroit Industrial Mfg. Co., without luck.

Someone even sent Smith a copy of an article on How to Name a New Product in hopes it might help.

"What we're looking for is a name that hits us right between the eyes," says Smith, a former football player who has headed Detroit Harvester since 1951.

"Any ideas?" he adds hopefully. END



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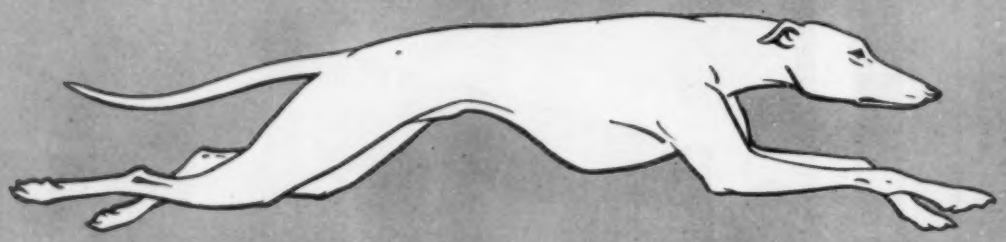


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New ORGANIZATION CHART SHOWS at a Glance:

1. Executives' **SPECIFIC FUNCTIONS** ...

2. ...and their **RESPONSIBILITIES TO OTHER EXECUTIVES**

	Board	President	Vice-Pres., Finance	Vice-Pres., Marketing	Director, Advertising	Legal Counsel	Vice-Pres., Manufact.	Vice-Pres., Personnel
Establish over-all objectives	B	A	E	E		E	E	E
Approve over-all plans	B	A	E	E		G	E	E
Direct over-all operations	B	A	G	G		G	G	G
Approve expansion plans	B	A	E	E		F	E	F
[illegible]	[illegible]	[illegible]	E	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Decide on tax matters		B	A			G		
Coordinate budget	F	B	A	E			E	
Determine financing needs		B	A					
Determine marketing policies		B		A	G			
Over-all sales forecast	F	B	F	A			F	
Coordinate product expansion		B	E	A			E	
Plan advertising	F	D	E	B	A		G	F
Administer legal matters		B	G			A		

A *Actual job responsibility*
B *General supervision*
C *Direct supervision*
D *Decide on specific points*
E *Must be consulted*
F *Must be notified*
G *May be called in*

Mapping the Executive Setup

● A new linear chart (above), developed by a Dutch consultant, is an easy-to-read map of who does what in a company or one of its departments or divisions.

● It has many advantages over predecessors such as the pyramidal organization chart or the bulky manual.

THE EXECUTIVE who likes corporate organization charts will want to look twice at the one above. It's the latest thing in diagrammatic gadgets—originally devised by a Dutch consultant, Ernst Hijmans. It is supposed to tell quickly who's who and what's what in a corporate, divisional, or departmental hierarchy. It's already popular with some 30 U.S. companies, including Corning Glass Works, Gamble Bros., and Sears, Roebuck subsidiaries.

Converts plump for the linear organization chart as a big improvement over old methods, such as the pyramid chart and the manual. The pyramid chart is adequate to illustrate the chain of command. But it doesn't report who makes specific decisions, or describe an executive's role in any detail. The usual way to supplement it is by recourse to a voluminous organizational manual prescribing the proper relationships and responsibilities. But the manuals—cumbersome and often outdated—rarely earn much attention.

• **Virtues . . .**—Fans of the new chart boast that it's an easy-to-read map of just who does what and of how to get a given job done. In a minute, it can educate one executive on how many others he must consult—or defer to—in a variety of areas. What's more, it can be easily changed to keep up with shifts in the organization.

Sample questions the chart is designed to answer:

- Is a key man being bypassed?
- Are too many people in the act?
- Is an executive spending too much time on routine? Are work loads unbalanced?

Using the chart, you can analyze the contents of an executive's job. With an overlay on the strip denoting his functions, you take note of which are routine, which supervisory, and which executive—and then find out how much time he spends on each.

The linear chart can also be helpful in considering the effect of a proposed change in organization. And because it clearly defines a man's job, it can eliminate squabbles over jurisdiction.

• **. . . And Vices**—However, the new chart is obviously no more than a tool. As such it is subject to the big drawback that affects all mechanical aids to

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Diamond INDUSTRIAL TV

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Viewing Screens in basement guardroom enable guard to watch the roof easily and comfortably in addition to other duties.



Two tower-mounted Diamond ITV Cameras automatically sweep back and forth watching the 29 acres of roof. This installation has been in continuous operation since September, 1955.

Remotely controlled zoom lenses . . . remote control to stop, start or angle either camera, enables the guard to take a close look at anything suspicious. Remotely controlled windshield wipers on weatherproof camera housings keep viewing windows clear in bad weather. Fire hasn't a chance to get a serious start.

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management: The fact the chart says something doesn't make it true, especially with interpersonal relations.

It's very difficult to discover, except in a general way, exactly who does what in a company—and with whom. Some business researchers and consultants doubt anyone ever will know—at least not formally, in such black-and-white terms as a chart might show.

It all depends, these spokesmen say, on the situation—the interests, personalities, and political strengths of the executives in question. It's possible for a staff man in good standing to influence—or even control—more decisions than he or his colleagues would ever admit.

• **Converts**—But the linear chart still promises to be a handy guide to formal job functions and interrelationships. Besides the 30 U.S. companies that have already found it so, some 50 more are reportedly looking at it seriously.

In Canada, Leetham Simpson, Ltd., a Montreal consulting firm, is pushing the technique. So far, the list of converts embraces Canadian Car & Foundry Co., Ltd.; Anglo-Newfoundland Development Co., Ltd., a major pulp and paper producer, and a dozen other companies. A U.S. concern with which Leetham Simpson is affiliated—Serge A. Birn Co., Inc., Louisville consultants—presides over applications in the U.S.

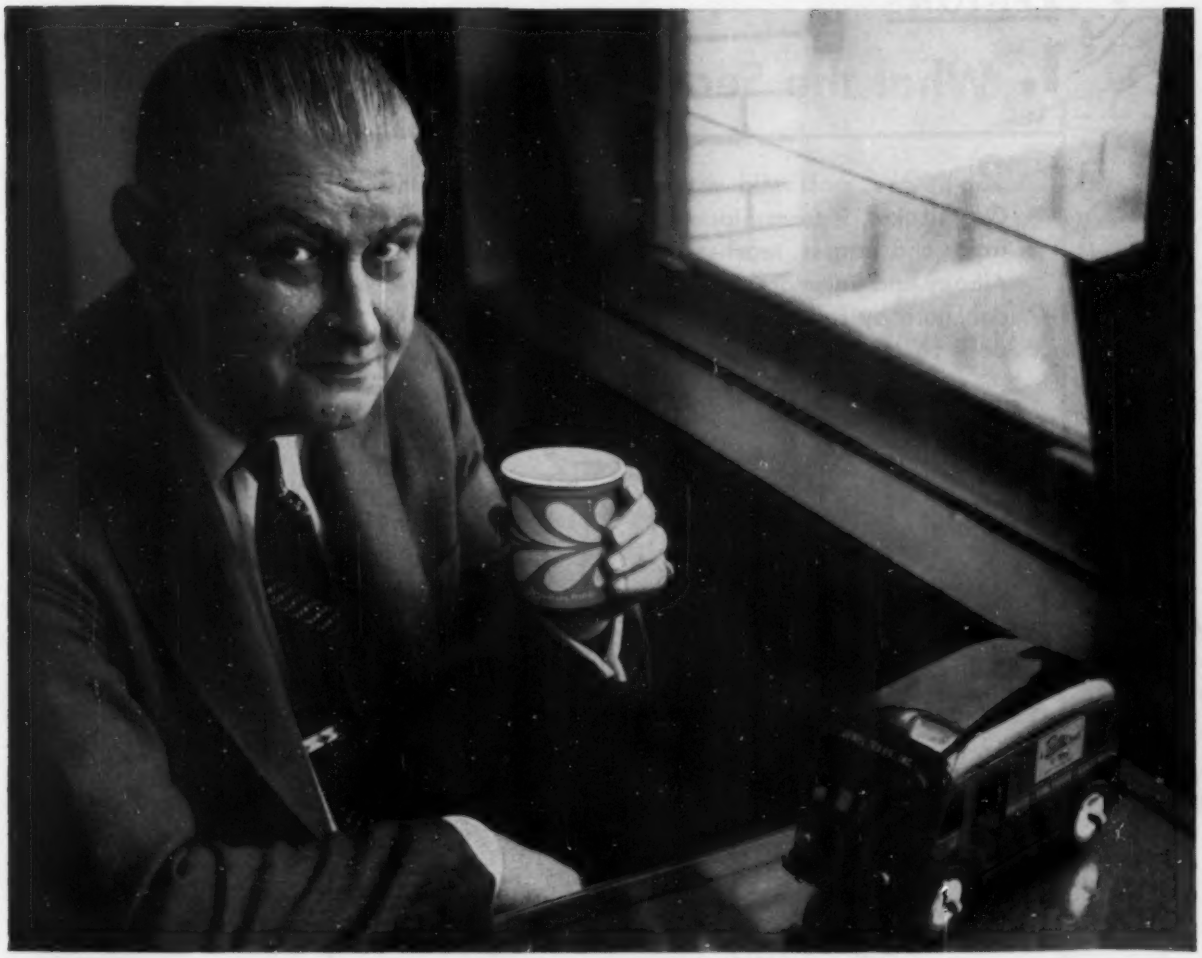


GEORGE ROMNEY, head of AMC, says he's . . .

Tooled Up for 1958

American Motors Corp. announced that not only are its 1958 models of the Nash, Hudson, Rambler, and Metropolitan largely tooled up, but planning for 1959 and 1960 is under way.

AMC President George Romney hopes this will scotch rumors that either the Nash or Hudson line will be discontinued. He forecasts "in the black" motor car operations by 1958, and Detroiters predict one important money saver for AMC: integrated basic body shells for the whole line.



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Saves the heat! Keeps hot liquids 10° hotter in a ten-minute period.

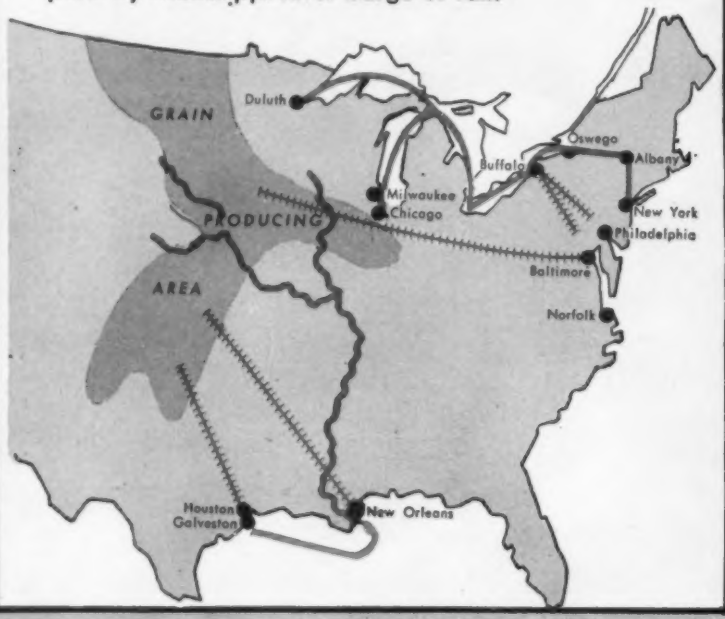
Saves the shape! Remains rigid and sturdy in the hand.

The secret is a plastic inner coating — similar to real china—resulting from Lily's 10 years of research for a truly satisfactory hot drink cup.

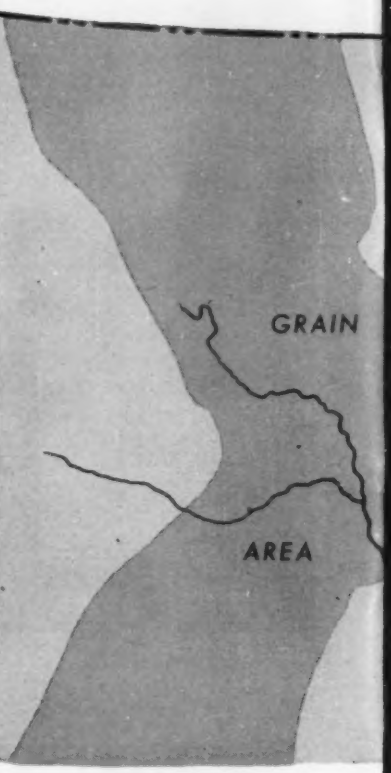
A growing number of executives concerned with company morale are specifying China-Cote Cups from their in-plant feeders and vending operators. We'd like to tell you who they are and give you a great deal more China-Cote information. Your own personal comparison test can be arranged... without obligation. Just write us. *Lily-Tulip Cup Corporation, 122 East 42nd St., New York 17, New York.*

1. What the Seaway Will Do to Grain Exports

2. NOW most Midwestern grain goes down the Great Lakes, is transshipped at Buffalo or Oswego to trains and barges, reaches tidewater at such ports as Albany and Baltimore. Some grain goes all the way to Baltimore by rail. South central grain moves to Gulf ports by Mississippi River barge or rail.



3. NEW PATTERN



St. Lawrence Seaway Presages a

Indiana University study concludes that a big share of U. S. grain exports would find it cheaper to go to sea via the St. Lawrence. This would be a blow to Atlantic and Gulf ports, which up to now have handled the bulk of U. S. grain export shipping.

SINCE the idea of the St. Lawrence Seaway (map, right) was conceived, everybody involved has been aware of the tremendous economic impact it would have on communities and industries along its route.

They also realized that its repercussions would be felt throughout the shipping world. Until the ocean ships swing into full use of the Seaway in the 1960s, the magnitude of the competition of Seaway ports with other U. S. ports will be subject to speculation and debate. But whether the ocean ships carry 30-million tons or 50-million tons through the deeper canals—the estimates are that far apart—it is widely held that grain will be one of their chief cargoes.

• **Estimates**—This week, a basis for estimating the grain traffic, and its wide implications, was provided in a 240-page study issued by the Indiana University School of Business. Among its major conclusions:

• Over 30% of U. S. grain exports—around 150-million to 200-million bu.—may find it cheaper to go to sea via the St. Lawrence.

• Chicago could become the leading U. S. grain port, handling more than half of the Seaway total.

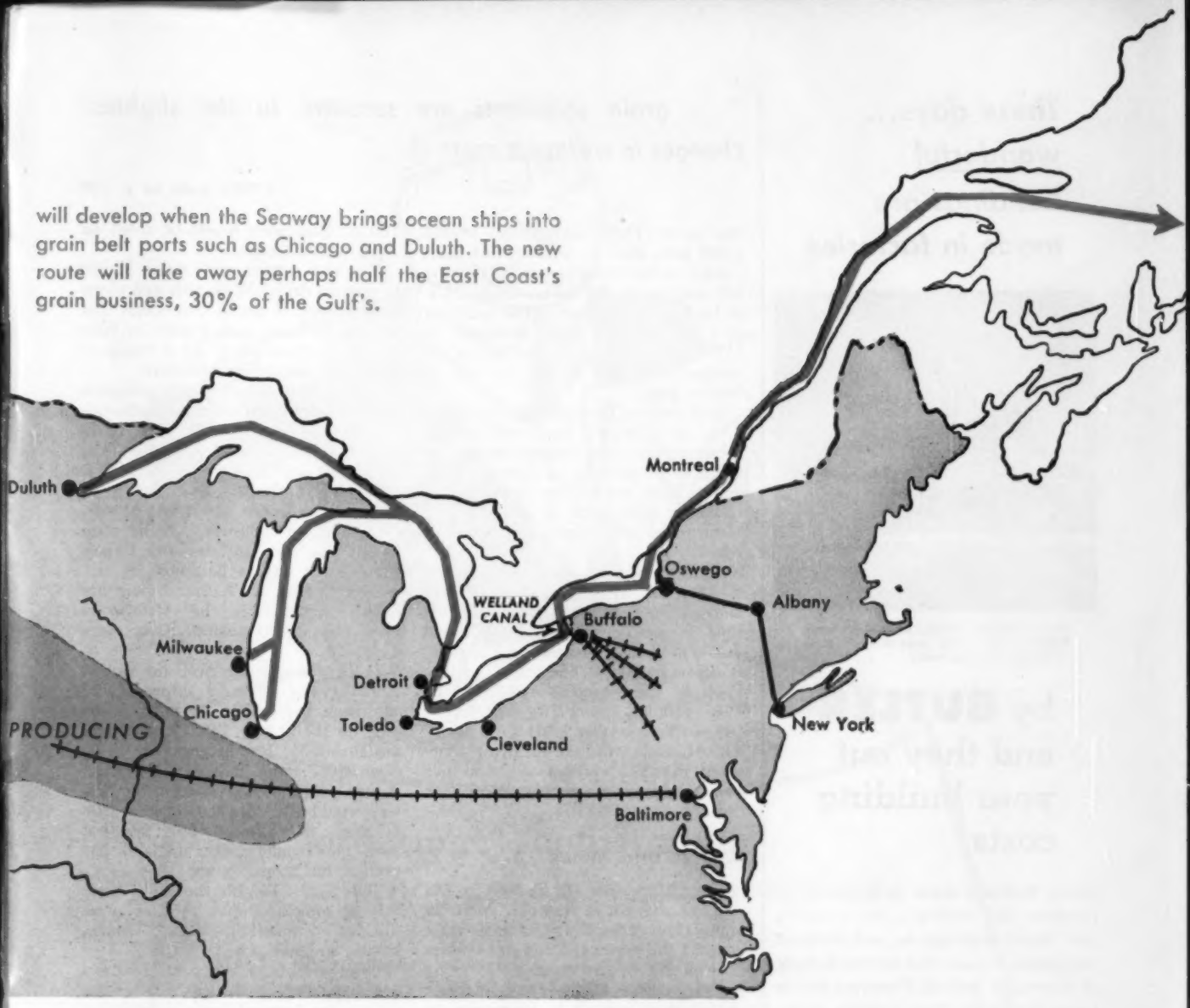
• Great Lakes ports may divert 50% of Atlantic ports' current grain business, 30% of the Gulf ports' potential 1961 grain business.

• If the grain industry were persuaded to store grain at lake ports during the winter freeze, the Seaway could handle more. But in the late 1960s, the Welland Canal must be expanded, lest it become a bottleneck.

• Domestic grain movements won't be affected by the Seaway, and until flour becomes a more important export item, neither will grain processors.

• **Arguments**—These conclusions probably will revive old arguments, maybe provoke new ones. People directly or indirectly involved—such as railroadmen,

will develop when the Seaway brings ocean ships into grain belt ports such as Chicago and Duluth. The new route will take away perhaps half the East Coast's grain business, 30% of the Gulf's.



Mass Shift in Grain Shipping

competing port officials, grain spokesmen, and economists who have made similar studies—say the Indiana study exaggerates the Seaway's potential diversion. It minimizes the handicap imposed by the Welland Canal, they add, and may overlook the role of Atlantic and Gulf grain elevator operators who control supplies of grain.

The study resulted from the lack of Seaway projections at the Chicago Board of Trade and from Indiana's interest in the field of water transportation. The research was conducted by Joseph R. Hartley, an Indiana research associate now on duty with the Air Force.

Hartley computed the cost of operating an ocean vessel on the Great Lakes as compared with one picking up grain in the Atlantic or Gulf, estimated Seaway tolls, figured rail freight charges to present grain ports, origin and destination of the several crops, and threw in a seasonal factor to accommodate the four months when the Seaway will be frozen.

I. New Competition

Looking to the 1960s, Hartley makes two basic assumptions: World demand for U.S. grain will continue strong; and Europe, fortunately situated for the Seaway, will remain our best customer.

Traffic through the present 14-ft. St. Lawrence canals, which restrict vessels to less than 1,600 tons between lake ports and Montreal, runs around 10-million tons. The U.S. share of the St. Lawrence overseas trade is small, around 700,000 tons, and little of this is grain because of the high costs involved.

But with 27-ft. navigation, there should be competition for grain among tramps, liners with regular schedules, and lake carriers.

• **The Field**—Tramps, which go anywhere for a cargo, are the backbone of the world's grain fleet. They run around 9,500 tons or better in size. Hartley notes that the bulk of them always will be able to use the Seaway because many destination ports for grain only have 28-ft. draft.

Liners will be attracted to ply the lakes on regular schedules by the traffic that the industrialized Midwest will generate. Since liners always like to use grain to fill out loads, they will be happy to find it waiting for them at

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". . . grain shipments are sensitive to the slightest changes in transport costs . . ."

STORY starts on p. 190

lake ports. Their size averages around 8,000 tons, and—by limiting fuel loads—some 10,000-tonners may be carrying full cargoes on the lakes. Since 71% of foreign flag freighters draw less than 26.5 ft. with full loads, compared to 15% of the U.S. merchant fleet, most foreign vessels will be able to pick up Seaway grain.

Lake carriers, the type that haul about 70% of Canada's eastbound export grain, are especially designed to haul as much as 20,000 tons or more at 27-ft. draft. They will deliver grain to St. Lawrence ports such as Montreal for ocean ships that don't penetrate the lakes.

Hartley says it's too early to tell which of the three types of vessels will dominate the Seaway grain trade. If the lakers do, the Welland Canal should not become a bottleneck so soon. If ocean tramps or liners win out, the Welland may become restrictive by 1965—certainly by 1970, since ocean tramps carry smaller loads than lakers. Then Canada will have to invest something like $125-million to build five new locks and double Welland's capacity.

II. Plus and Minus

Grain shipments are sensitive to the slightest changes in transport costs. So a projection of Seaway grain traffic must consider the pluses and minuses of shipping on the St. Lawrence.

• **Comparative Costs**—Though critics of his study say it is premature to estimate Seaway tolls that have yet to be agreed on, Hartley says they are fairly easy to figure out. If $20-million is needed to amortize and pay Seaway operating costs (a high figure, he says) and if the Seaway gets 30-million tons of traffic (a low figure) the toll would be 40¢ per ton if a flat rate were charged. It's possible, though, that grain will be charged less. Hartley figures a range from 25¢ to 67¢ per ton.

Liners and tramps must take four days longer on the round trip between Hamburg and Chicago rather than to Baltimore. If it takes $1,706 to run a foreign-flag 8,000 ton-tramp one day on the lakes, you would have to add 85¢ per ton. With 40¢ in tolls and 15¢ in other charges, that adds up to about 6¢ per 100 lb. as the added expense of going to Chicago, instead of Baltimore. If the ship was an inbound cargo and splits added costs accordingly, the cost may be only an added 4¢ per 100 lb. Gulf ports would be about on a par with Chicago.

Big lake carriers cost about $2,400 to operate daily. With tolls and elevation charges, it would cost about 10¢ per 100 lb. more to ship grain by laker and have it picked up by a tramp at Montreal, instead of Baltimore.

• **Savings**—Most of the eastbound grain—whether for domestic consumption or export—now moves on the Great Lakes from Duluth, Chicago, and Milwaukee to Buffalo and Oswego. There it is transshipped aboard canal barges or railroads to ocean ships at Albany, New York, or Baltimore. Some grain from states such as Iowa and Illinois goes all the way to Baltimore by rail. In recent years, south-central grain has been diverted from the Atlantic to Gulf ports by Mississippi River barge and trains.

With the present overland freight rates, Hartley figures a shipper could save from 16¢ to 20¢ per bu. by shipping on the Seaway. Rail export rates are already so low in the East as to leave little room for cutting. Even if they were cut, he contends, the Seaway would still save as much as 10¢ per bu. The Seaway would save not only the freight costs but also the charges for transshipping.

• **Rate Cuts**—Toward the Gulf, there may be some reduction in rates as result of competition among trucks, barges, and railroads.

On the basis of the potential costs and savings of the Seaway, Hartley has defined an area of grain production within which the St. Lawrence will be the cheaper route to export.

The line—drawn conservatively, he says—goes from Canada, through eastern Montana, down the western boundaries of Wyoming and Colorado, east along the northern border of New Mexico, through northern Oklahoma and central Missouri, along the Ohio River to Cincinnati, then to Cleveland.

III. Shipping Potential

Within the Seaway's tributary territory, Hartley figures, about 167-million bu. of wheat is exported annually. This assumes that the 1952-55 period with average exports of 243-million bu.—about 22% of U.S. production—is a reasonable base. For 70% to 85% of the territory's wheat, the Seaway would be cheapest route for export: Since 62% of wheat movements occur when the Seaway route is open for navigation, the Seaway is likely to handle from 73-



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million to 88-million bu. of wheat. (Checking his figures according to the varieties of wheat now moving through Atlantic and Gulf ports Hartley estimates 40% of the Gulf's 102.3-million bu. and 45% to 50% of the Atlantic's 74.6-million bu. could be attracted to use the Seaway—about 75-million to 78-million bu.)

• **Area Produce**—The Seaway territory produces 86% of U.S. corn. Allowing for the winter freeze, the lake-St. Lawrence route could possibly attract 46.8-million bu. of export corn—54% of Atlantic loadings, 45% of the Gulf's loadings.

On the same basis, Hartley reasons that the Seaway should lure 7.6-million bu. of barley, 5-million bu. of grain sorghums, 11-million to 16-million bu. of soybeans, and 5.8-million bu. of other grain. Winter storage and greater export demand could increase the total from its 150-million to 200-million bu. range.

• **Impact**—Such a pronounced shift in U.S. export grain movements would be widely felt:

• Atlantic ports (Baltimore, Philadelphia, Albany, Norfolk, New York) may lose 50% of their current volume of 90-million to 100-million bu; and Gulf ports (New Orleans, Galveston, Houston) may lose 30% of their potential shipments of 1961 which, allowing for increases in soybean and grain sorghums, would run about 75-million bu.

• Chicago should gain the most—from recent loadings of 22-million bu. (partly for domestic use) to something like 84-million to 107-million bu. by 1966 (compared with New Orleans' recent 78-million bu., Baltimore's 74-million bu.). Its advantages are proximity to excellent inland water, rail, and highway connections.

• Duluth, already shipping 118-million bu. for domestic and export use, should handle 50-million to 70-million bu. for export alone.

• Milwaukee should handle "a small but significant" amount. Detroit, Toledo, and Cleveland should get traffic from their hinterland.

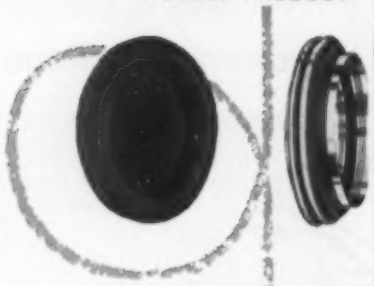
• Buffalo and Oswego will lose much of their transshipping business, but Buffalo should retain a big portion of its receipts for milling and winter export.

• Inland terminal markets won't be affected because they will continue to gather grain for export, as well as for domestic consumption.

• Grain processors along the lakes will find their flour more competitive in world markets.

• Unlike Eastern railroads, the Western lines will not be hurt because they still must bring grain to the lake ports. **END**

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Too Much Town

Kennecott, which sold company homes to workers, says incorporation that resulted goes too far

When Kennecott Copper Corp. decided in 1955 to sell homes to its workers in its Arizona mining community of Hayden (pop. 1,494), it wanted to get rid of excess paternalism. But the affair has backfired on the company.

The town incorporated itself, taking in not only the existing residential areas but also the land where Kennecott is building a smelter. This was too much for the company, which is now in the courts trying to have the incorporation set aside.

Kennecott opened the mining camp 75 mi. north of Tucson in 1911—its mines are at nearby Ray—and owned the entire town of Hayden until it decided to turn it over to the land management firm of John W. Galbreath & Co. of Columbus, Ohio.

"We felt the people would be better satisfied owning their own homes," said A. P. Morris, division general manager. "Before, we had to move people out after they retired, and there was a general paternal situation that wasn't desirable. The mine workers were able to buy the houses at a reduced figure. We expected them to incorporate and run the town themselves."

• **Town Council**—In December, a petition with 230 signatures was submitted, and the Gila County Board of Supervisors quietly approved the limits suggested by the town council. Then Kennecott saw how far the limits extended.

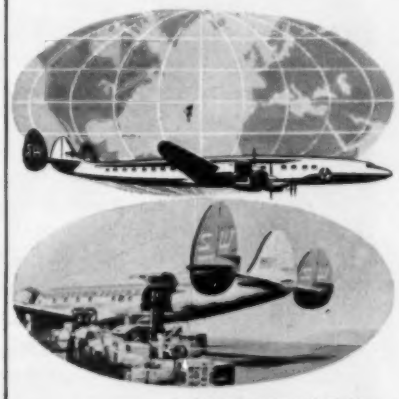
The company asked County Attorney George P. Senner Jr. to act against the town, charging that many of the petitioners had not been owners of real property, and that the incorporated area included large uninhabitable areas—against Arizona law.

Senner held the incorporation was legal, that the land was inhabitable. The company then sought a writ of mandamus asking him to declare the town council illegal, and Senner entered a motion for dismissal. The motion now is in Superior Court.

"All towns and cities have industrial areas as well as residential districts," replied Mayor James R. Hastings, a 33-year-old high school teacher of mathematics.

• **Services**—Hastings says that taxes from Kennecott are vital to provide street improvements, lights, garbage collection, and other services. "Kennecott unloaded the responsibility of the town and now they don't want to support it," he charged. END

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Latin America sets all-time highway building record

In its February 1957 issue, CONSTRUCCION reports to its audience on the present status of highway building in Latin America. That report is so important to many U. S. manufacturers who are now selling this booming market – or want to – that we are reprinting the major part of the report here.

For the ninth consecutive year, highway building in Latin America has exceeded all previous records! In its year-end report, the International Road Federation has announced that the Latin American nations increased highway spending 77.8% this year over last. In 1955, they spent $350 million; in 1956, $622 million.

From a recently completed study of construction plans of the Latin American countries, CONSTRUCCION anticipates that there will be at least a 30% increase over 1956 in 1957.

Cuba's highway program showed the greatest increase. That country had been allocating about $5 million annually for highway construction. A two year plan for 1956-57 will jump expenditures for highways to nearly a quarter of a billion dollars. Costa Rica followed Cuba in second place with an increase from $2.5 million in 1955 to $10.5 million in 1956. Estimates are that Costa Rica will double its expenditure in 1957.

However, in total expenditures, Colombia's $102 million for highway construction led all the other Latin American nations.

U. S. help has been extended to many countries of Central and South America to aid these countries to develop highway transport. This aid has been in the form of financial, technical or material assistance. Included are: engineering services as well as management of highway departments; and in some countries consulting services or assistance in training highway personnel.

During 1956, aid programs of the U. S. were continued in Colombia, Honduras, Paraguay, Haiti, and Peru. At the same time programs were increased in Guatemala, Costa Rica, Bolivia, and Chile.

That these highway building activities of each Latin American country have proved successful is seen in the results. CONSTRUCCION has prepared a table showing total number of kilometers of highway in each Latin American country. If you would like a copy, please write to Charles S. Mill, Publisher, CONSTRUCCION, 330 West 42nd Street, New York 36, New York.

• • •

This great growth in highway construction is matched by a similar growth in other types of construction in Latin America. It is understandable, then, that more and more U. S. manufacturers are taking a new look at opportunities in the Latin American construction market.

Since more people in this Latin American construction market pay to read CONSTRUCCION than any other U. S. industrial magazine, it is not surprising that CONSTRUCCION carries nearly twice as much advertising as any other magazine in its field.

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Refugee School Finds a Home

Sopron University, which fled from Communist-terrorized Hungary, is holding its forestry courses at a lumber camp in British Columbia.

LAST DECEMBER, Jack Pickersgill, Canadian Minister of Immigration, went to Austria to facilitate the movement of Hungarian refugees to the Dominion. One weekend, he discovered that virtually the entire Sopron University—a 150-year-old school specializing in forestry, geology, mining, and geodetics—had escaped across the border into Austria.

Pickersgill recognized that the school's faculty and students contained many men with training or intended-training in which Canada is critically short. He then did two things. First, he got the mining industry of eastern Canada to take men with those interests and training. Second, he proposed to James Sinclair, Minister of Fisheries and Acting Immigration Minister in the federal government, to transfer the entire school to the University of British Columbia, a provincial university at Vancouver.

• **Answer to a Need**—Both men knew that British Columbia was extremely short of trained foresters. And there was another consideration. Sopron wanted to migrate as a unit.

Dr. Norman Mackenzie, president of UBC, was enthusiastic, but his university's facilities already were being strained by the booming growth of the province. He suggested tapping the forestry industry. Sinclair, knowing that a construction camp of Powell River Co., Ltd.—a big newsprint producer—would soon be vacant, contacted M. J. Foley, president, and H. S. Foley, chairman, of the company. The brothers immediately offered the camp, built to house 550, and located in Powell River—a paper mill city tucked into the jagged coast of British Columbia. Within 48 hours of the time Pickersgill first heard of Sopron, an invitation had gone to Sopron in Austria, and Sopron had accepted.

• **Hitches**—In all, 188 students from Sopron and 24 faculty members and their families—a total of 294—arrived in British Columbia. Naturally, there were many problems involved in a transfer of this magnitude. There was the sudden uprooting of an old educational institution, drawing students away from their families, and setting out for an unknown land. There were psychological problems of these people in the refugee camps. And there was pressure



CLASSROOMS where Hungarians tackle the English language and study U. S. methods of forestry are held in barracks of lumber camp lent by Powell River Co. of Vancouver.



LIVING QUARTERS include a central mess hall. The Canadian government pays $3 per person per day for food—but the thrifty Hungarians are making money on the deal.



SOCIAL LIFE involves language problems, but not on the soccer field. The Hungarians, pros at the game, already have defeated every Canadian team in the neighborhood.



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HUNGARIANS run the camp themselves, all taking a hand in cooking and cleaning.

on the students from Communists in Austria to go back to Hungary.

Two days after Sopron's acceptance, Dean George S. Allen of the UBC forestry school and Fred H. McNeil, executive assistant of Powell River Co., set out for Austria, armed with a color film, The Powell River Story, which tells the story of lumber. McNeil says the refugees were "aghast" at our technical equipment.

The film was shown twice. It had to be, because one group was still interned for carrying arms. McNeil says that at the first showing, many regarded the film as a specially prepared propaganda piece made for the one purpose of enticing the Hungarians. After the showing, Allen and McNeil were questioned by the hour. What are the wage rates, for instance?

To allay these doubts and reservations—and the pressure from Austrian Communists—Hungarian Dean Kalman Roller and three students were taken to British Columbia to see for themselves. That clinched the deal.

• **New Quarters**—The Hungarians arrived Jan. 21. Three weeks later, they moved into the Powell River quarters. Their first decision was to run the camp themselves. Powell River Co. supplied the facilities—heat, light, furniture, blackboards, sewing machines, washing machines—and cut up some of the barracks for classroom use. The federal government pays for their food at the rate of $3 per person per day, and the Hungarians are operating at less than this figure.

• **The Campus**—Sopron University was now ready to set up school, with 22 classrooms, student and faculty lounges, and a TV room. The schedule is heavy concentration on English until May 1. After that, the men will take to the woods with the provincial Forestry Service, various companies in the industry, and the Federal Science Service. The students will be paid regular wages.



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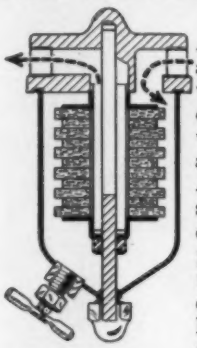
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This fall, the Hungarians will reassemble for classes. The idea is to hold them at the University of British Columbia, but there's still the unsolved problem of finding quarters for the students. Another snag is whether the students can learn enough English by fall to get along. UBC thinks there will have to be a swing shift for laboratories and lectures, for lack of other accommodations.

• **Curriculum**—The courses being conducted at Powell River now include lectures by university professors, government and industry men on customs, culture, economics, and history of the free world—with particular emphasis on Canada—plus a course on the forestry and economics of the West Coast in contrast with European forestry.

Powell River Co. has set aside a 160-acre plot of young timber as a demonstration forest for the Hungarians. They are surveying this to show how it would be cared for under European methods. They also use it for field trips to learn the native species.

Sopron is not being set up as a separate school of forestry. In fact, Sopron as an institution will disappear when the students and faculty are integrated into the University of British Columbia, or are snapped up by industry. But there is some talk of keeping the university's name alive in scholarships.

• **Adjustment**—Meanwhile, the Hungarians are adjusting to their new home, and British Columbia is adjusting itself to the Hungarians. The students are crackerjack soccer players, and although soccer is one of the big games in Canada, the Hungarians have already licked every team around Powell River.

"These people are as happy as can be," says McNeil. He sees a big change in mental outlook since he first talked to them in the dark December days. Then, in Austria, they were tense. You smiled at them, and they did not smile back, he says. They were not anxious to engage in conversation. Now they are loosening up. McNeil says they were like a clenched fist before; now the fist is opening, and the muscles are relaxing. It's common for a professor from UBC to go to the camp for a one-hour lecture, and stay on another three hours to answer questions.

Even so, there's still a good bit of worry. What about the parents that were left behind, and what about others close to their families? Some of the boys talk of going back to Hungary.

One byproduct of the mass movement of Sopron has been a wave of romance. Since the students first fled across the border to Austria, 11 couples from among the students have married—in Austria, during the 7,000-mile journey, or after reaching British Columbia. END



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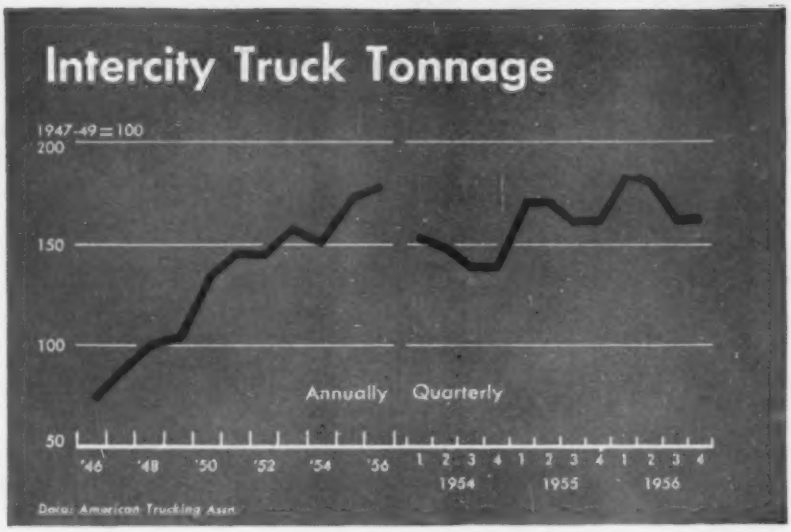
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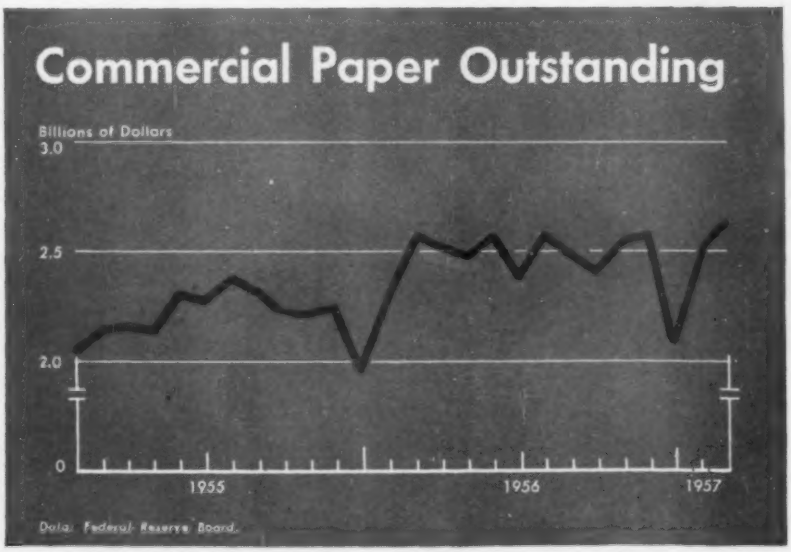
CHARTS OF THE WEEK



Still Rising, but Not So Much

Intercity freight transported by the trucking industry last year reached an all-time high, 3.2% above 1955. The American Trucking Assn. reports, however, that the increase fell short of the 1954-1955 gain of 14.9%.

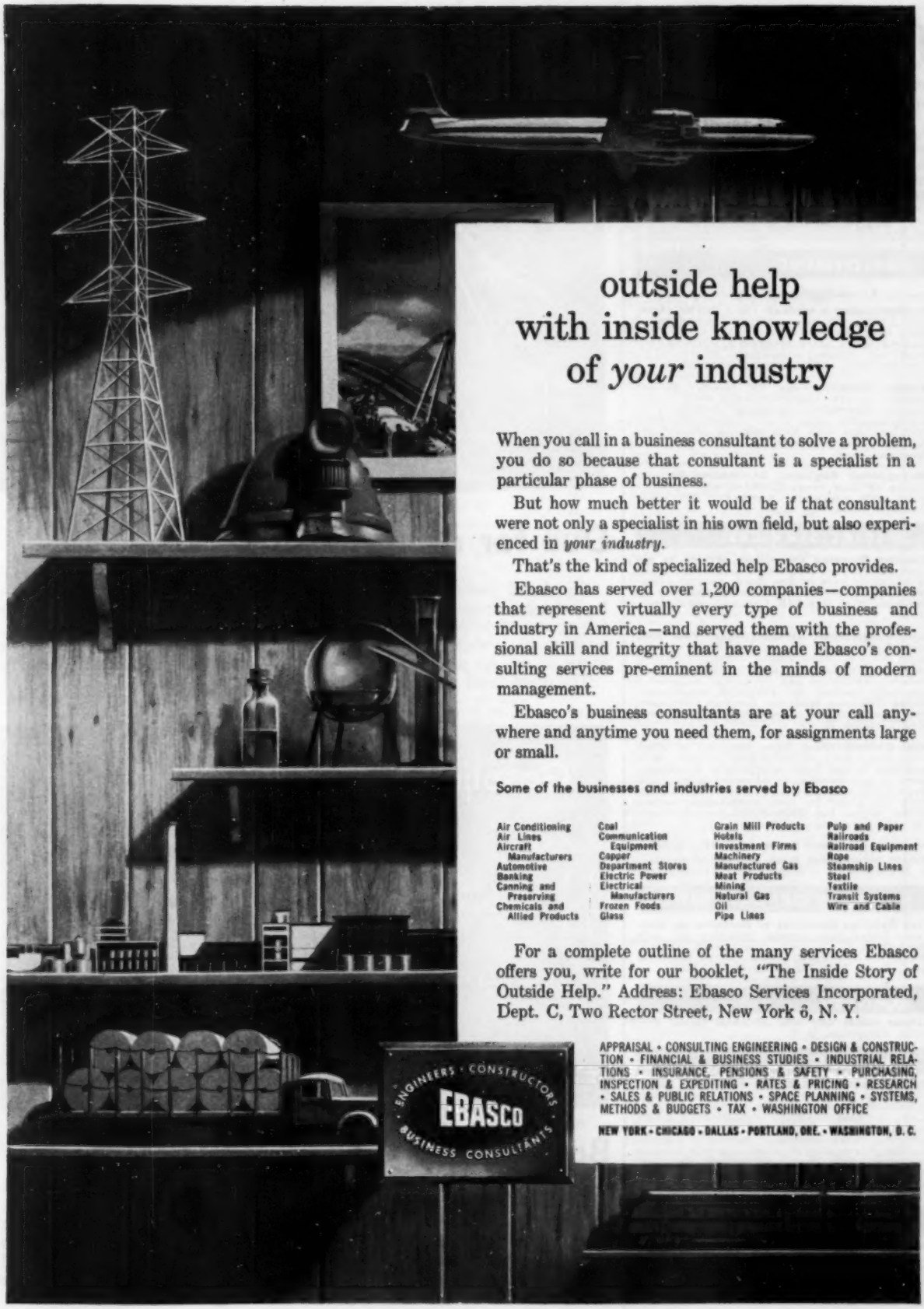
On a quarterly basis, 1956 tonnage figures indicate that the margin over 1955 shrank from the first to the last quarter: In the first and second quarters, 1956 tonnage rose 7.9% and 5.6% respectively over the comparable year-ago periods; the third quarter was fractionally higher than a year ago, and the fourth quarter fractionally lower. In 1955, the year-to-year spread held steady.



Borrowing Hits a New Record

Commercial and finance company paper outstanding at the end of February was at a new high of almost $2.7-billion —2% above the previous high of a year ago (also equaled in November, 1956).

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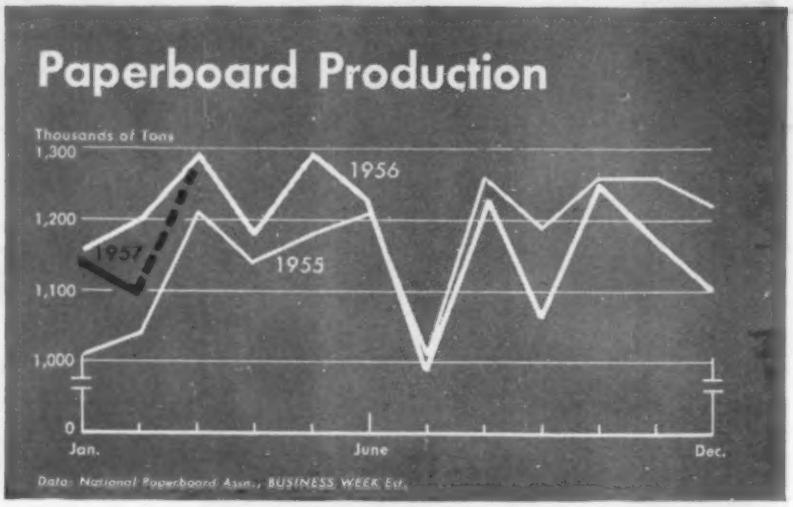
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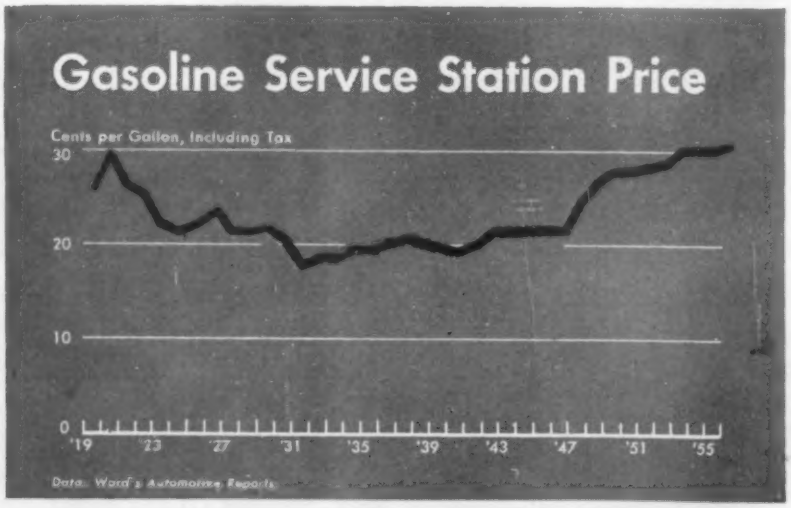
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Due for a Streak of Luck

Paperboard production continued to lag behind year-ago levels during the first quarter of the year. This makes the ninth month in which production failed to top its year-ago performance.

The down trend may break if April production continues at current rates—about duplicating the near 1.2-million tons of a year ago. Since mid-March, weekly output has been averaging about 2% higher than in the comparable 1956 weeks.



Back to the Good Old Days

The service station price of gasoline (including taxes) has returned to its all-time high of 36 years ago, Ward's Automotive Reports says. The 1920 peak was 29.83¢ per gal. Last year, it reached an estimated 29.50¢ per gal. The low point of 16.98¢ per gal. was reached in 1931.

Car owners can expect more of the same. Eleven states are considering bills calling for gasoline tax increases, and other states are preparing to introduce similar legislation.

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Labor's Time of Crisis

We make a real mistake if we think that Dave Beck, Brewster, Hoffa, and others of their ilk are only bad men who have come to positions of power in their unions. Bad, they are; but they are symptoms of a deeper problem.

As labor leaders, they are exceptional, one can believe, in their wild, and probably illegal, financial dealings, their open ruthlessness, and their flagrant disregard of public opinion.

Most labor leaders profess—with complete sincerity—to be outraged by the Teamster officials' conduct revealed by the McClellan committee. The quick action by AFL-CIO in suspending Beck (page 50) testifies to such revulsion.

But the problem is bigger, much bigger, than Beck and the others like him—whatever their number might be. In the same way, the problem of predatory industrial empire building was bigger than John D. Rockefeller; and the problem of unscrupulous finance was bigger than Samuel Insull.

There were gaps in our law and slacks in our law enforcement system that made predatory and unscrupulous business practice possible, thereby tempting men to engage in it. The problem was how to provide corrupt practices acts and SEC regulations without putting legitimate business in a paralyzing straitjacket. We now must undertake to do the same thing with labor unions.

That will be even more difficult. Union members do not have the same vital interest that stockholders have in the finances and affairs of their organization. Unlike stockholders, they receive no income from the union. It comes from their employer, and the rougher, tougher the union, the higher that income is likely to be.

Rank and file indignation at officer misconduct is apt to be short-lived. Thus the confidence of Beck, Brewster, Hoffa, et al. about their union jobs, which is more than just a front. They do not fear a member revolt. The real threat comes from government and prosecuting agencies. And real reform will have to come from exactly the same sources. To be effective, it will have to be more stringent than the reforms imposed on business—because the public cannot count on the union members to hold their officers to account, in the same way that it can count on the victimized stockholder or swindled investor.

Such reforms undeniably will restrict the sphere of union activities; they may even rule out tactics that have been important to unions in the past.

To be frank about that is not to say that labor does not have and does not deserve public support for its basic objective; good wages, decent working conditions, fair treatment, and the right to deal collectively. It is to say—and say most positively—that labor men make a mistake when they assume labor unions are so widely approved that they cannot be subjected to public regulation. If labor cannot accept this fact, then those unions that pursue their objectives in ways that offend public morality will be struck down and other instrumentalities, or the government, will be forced to take over the job for which they were originally created.

Clarity on the Budget

Pres. Eisenhower's strong defense of the Administration's $71.8-billion budget focuses attention once again on government spending. This time, however, his contribution should clarify the issue.

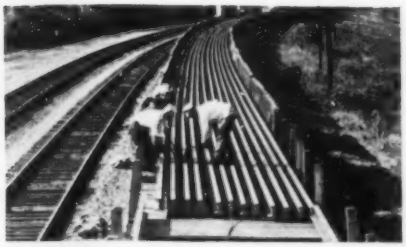
The President's comments were clear and to the point. He emphasized that this was not a budget that could be cut easily. As he put it, the budget "was not only made carefully, it was made intelligently." He pointed out that if the U. S. was to maintain its strength at home and abroad, government spending cannot be cut back.

This is the President's answer to all the questions that have been raised about the future spending plans of the Administration. Up until now, there has been no clear-cut sign of just where the Administration stood. As a consequence, the budget has been under furious attack from many quarters and it appeared that many of the spending programs planned by the Administration would be curtailed or eliminated.

It was probably this danger that aroused Eisenhower to his spirited defense. The budget is always subject to question and debate by Congress and the public. But this year the Administration itself seemed divided, despite the fact that the budget is its most important responsibility, the very heart of its foreign and domestic policies.

Congress and the public can still question the size of the budget and the various programs it calls for. But the President's comments leave no doubt that he is not evading the responsibility for the spending contemplated during the next fiscal year. He is serving notice that the Administration did not bring out a budget that was designed for reductions, and that he is prepared to fight against cuts.

If the President had spoken out earlier, the budget would not be the issue it is today. Now, mere defense is not enough. If the Administration believes in its budget as essential for the continued growth and stability of the economy, it must speak with one voice and work in unity to clear up the doubts and confusion that are now so widespread.



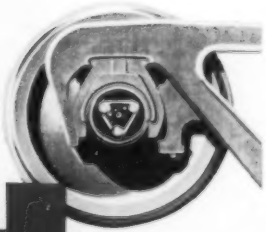
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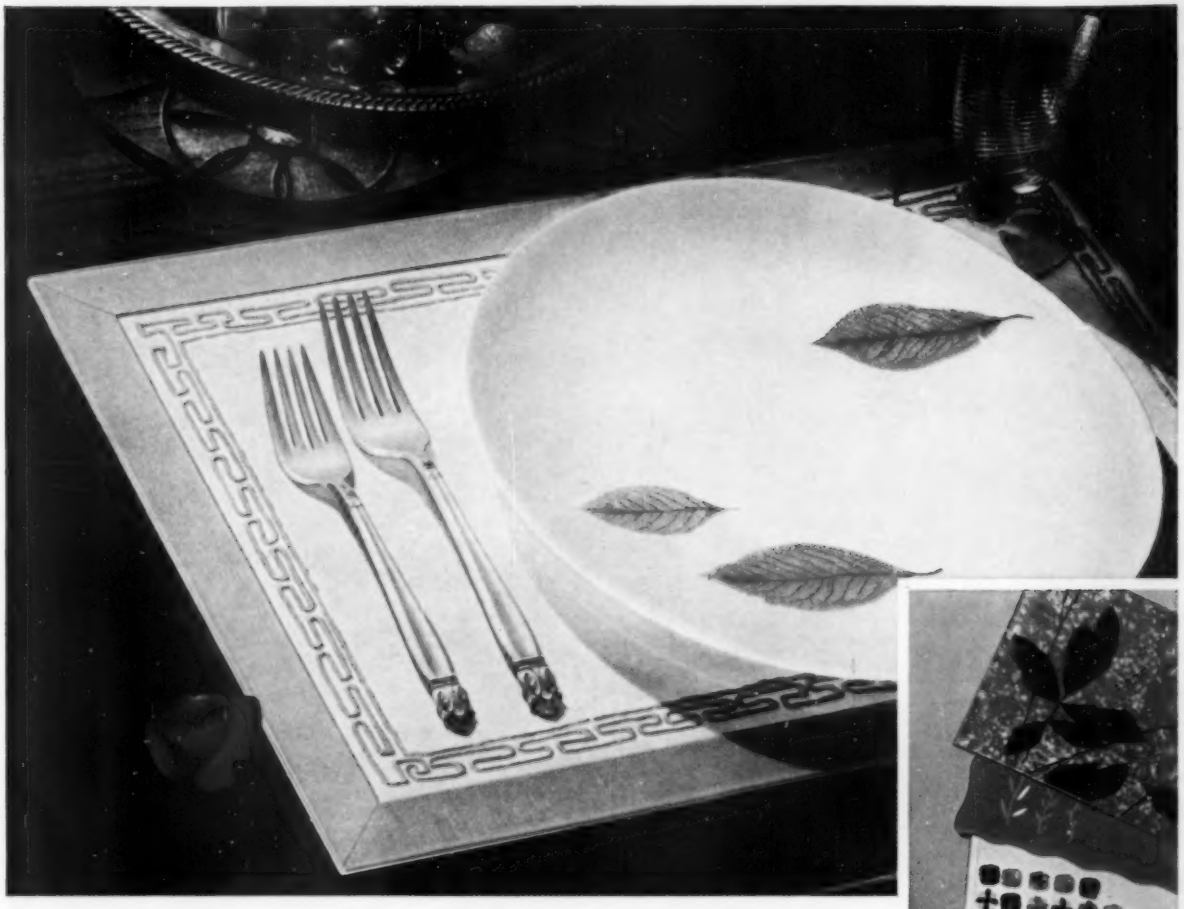


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